THE AMERICAN ENERGY INITIATIVE, PART 27: A FOCUS ON GROWING DIFFERENCES FOR ENERGY DEVELOPMENT ON FEDERAL VERSUS NON-FEDERAL LANDS

HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND POWER

OF THE

COMMITTEE ON ENERGY AND COMMERCE

HOUSE OF REPRESENTATIVES

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C O N T E N T S

THE AMERICAN ENERGY INITIATIVE, PART 27: A FOCUS ON GROWING DIFFERENCES FOR ENERGY DEVELOPMENT ON FEDERAL VERSUS NON–FEDERAL LANDS

THURSDAY, AUGUST 2, 2012

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENERGY AND POWER,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 9:08 a.m., in room 2123, Rayburn House Office Building, Hon. Ed Whitfield (chairman of the subcommittee) presiding.

Members present: Representatives Whitfield, Shimkus, Walden, Terry, Burgess, Bilbray, Scalise, Olson, Gardner, Griffith, Upton (ex officio), Rush, Markey, and Waxman (ex officio).

Staff present: Maryam Brown, Chief Counsel, Energy and Power; Allison Busbee, Legislative Clerk; Cory Hicks, Policy Coordinator, Energy and Power; Heidi King, Chief Economist; Jason Knox, Counsel, Energy and Power; Ben Lieberman, Counsel, Energy and Power; Michelle Ash, Democratic Chief Counsel, Commerce, Manufacturing, and Trade; Greg Dotson, Democratic Energy and Environment Staff Director; Kristina Friedman, Democratic EPA Detailee; Caitlin Haberman, Democratic Policy Analyst; Angela Kordyak, Democratic DOE Detailee; and Elizabeth Letter, Democratic Assistant Press Secretary.

OPENING STATEMENT OF HON. ED WHITFIELD, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF KENTUCKY

Mr. WHITFIELD. We will call today's hearing to order and certainly want to welcome our witnesses today. We will have two panels of witnesses. At this time, I would recognize myself for a 5-minute opening statement.

Today is the 27th day of hearings on what we refer to as the American Energy Initiative, and in this series of hearings, we have examined various aspects of the energy needs of our country, the policies and ways to be more productive, and today, I think most Americans would agree that we do face two primary problems. We have many others, but one, of course, relates to energy production and becoming more energy independent, and the other relates to our struggling economy and still relatively high unemployment rate, and today we are going to be focusing on two States that have

different stories to tell about energy production and lowering unemployment rates.

First of all, I would like to just talk briefly about North Dakota. North Dakota has an unemployment rate today of around 3 percent, and so it raises the question on the energy policy and economic policy, what is North Dakota doing that is different than other States? And what can we in Washington learn from that? And while we try to learn what North Dakota is doing right, we also need to contrast it with another State that has a lot of energy as well, and I might say that the picture is not nearly as bright in another oil producing State, Alaska, where output has been declining over the same span that North Dakota's output has been increasing.

Now, the main difference between Alaska and North Dakota is that Alaska has far more areas of federally owned and controlled lands, and this administration has substantially cut back on new energy leasing in these Federal lands and offshore areas, and while that may not be the only factor that has led to this difference of unemployment and economic growth, we hope this morning to find out how substantial a factor is it.

Now, Alaska has been a great source of American oil. Since 1970 16 billion barrels have made their way south on the Trans-Alaska Pipeline. That is a lot of domestic oil and a lot of jobs associated with it, but Alaska's largest field in Prudhoe Bay is now declining, and despite vast untapped resources elsewhere in the State as well as offshore, new exploration and drilling have been greatly curtailed by policy decisions in Washington, DC, and it isn't just Alaska. For example, this administration has cut back on new leasing in the federally controlled Gulf of Mexico and has also been slow to issue the necessary permits for previously leased areas, and the red tape facing energy companies operating on Federal lands throughout the intermountain west has kept the region below its potential for energy production and jobs.

In contrast, relatively little land in the energy-rich Bakken formation in North Dakota is federally owned. There the oil industry has been allowed to partner with private landowners to expand production. In the last decade alone, North Dakota has risen from the eighth largest producing State to the second largest. An estimated 35,000 new direct jobs and many more indirect ones are a big part of the reason why the State's unemployment rate is around 3 percent. In effect, North Dakota gives us a glimpse of what would be possible in many other parts of the country if only we could change some policy in Washington, DC. And I might add that gasoline prices unfortunately seem to be creeping up again. This should certainly serve as a reminder that increased production of domestic oil supply and demand still is an important factor. It is also worth noting that the oil industry in North Dakota is regulated by the State government, and the track record for safety and environmental protection is quite good. It is a model for reaping the many benefits from domestic oil production while keeping the risks at a minimum.

We all know that oil production is up in the United States, and that is a good thing, but we also know that that production, the reason it is up is because of the increased production on private

lands, and so as I said, we have two panels of witnesses this morning, all of whom are quite familiar with the policies and the ins and outs of the oil production industry, and so we look forward to their testimony.

[The prepared statement of Mr. Whitfield follows:]

Opening Statement of the Honorable Ed Whitfield
Subcommittee on Energy and Power
Hearing on "The American Energy Initiative: A Focus on Growing Differences for Energy Development on Federal vs. Non-Federal Lands"
August 2, 2012
(As Prepared for Delivery)

At a time when the country faces a weak economy, 8 percent unemployment, and soaring deficits, Congress owes it to the American people to take a close look at a state whose booming economy is at virtually full employment and is running a budget surplus.

And when a state is accomplishing this by expanding production of domestic oil, then the Energy and Power Subcommittee should also be taking a close look. And that is why we are here today; to learn what North Dakota is doing right, both on economic policy and on energy policy, and what we in Washington can learn from it.

And while we learn more about what is going right in North Dakota, we also need to contrast it with what is going wrong elsewhere. The picture is not nearly as bright in other oil-producing states such as Alaska, where output has been declining over the same span that North Dakota's has been rising. The main difference between Alaska and North Dakota is that Alaska has far more areas that are federally owned and controlled. And the Obama administration has substantially cut back on new energy leasing in these federal lands and offshore areas.

Alaska has been a great source of American oil. Since the 1970s, 16 billion barrels have made their way south on the Trans-Alaska pipeline. That's a lot of domestic oil and a lot of jobs associated with it. But Alaska's largest field, in Prudhoe Bay, is now declining. And despite vast untapped reserves elsewhere in the state as well as offshore, new exploration and drilling there has been greatly curtailed by decisions made in Washington.

And it isn't just Alaska. For example, the Obama administration has cut back on new leasing in the federally-controlled Gulf of Mexico, and has also been slow to issue the necessary permits for previously leased areas. And the red tape facing energy companies operating on federal lands throughout the Inter-Mountain West has kept that region below its potential for energy production and jobs.

In contrast, relatively little land in the energy-rich Bakken formation in North Dakota is federally owned. There, the oil industry has been allowed to partner with private land owners to expand production. In the last decade alone, North Dakota has risen from the 8th largest producing state to the 2nd largest. An estimated 35,000 direct jobs and many more indirect ones are a big part of the reason the state's unemployment rate is around 3% - essentially anyone who wants a job can have one.

In effect, North Dakota gives us a glimpse of what would be possible in many other parts of the country if only the feds took the handcuffs off.

And I might add that gasoline prices are creeping back up to $3.50 a gallon on average, 15 cents higher than this time last month. This should serve as a reminder that increased production of domestic oil can benefit all Americans, even those who don't live in states whose economies can be revitalized by it.

It is also worth noting that the oil industry in North Dakota is regulated by the state government, and the track record for safety and environmental protection is quite good. It's a model for reaping the many benefits from domestic oil production while keeping the risks at a minimum.

The difference between North Dakota and other states has nothing to do with geology and everything to do with policy. The good news is that we can change that policy. I believe that the more we learn, the more we need to allow the North Dakota model to apply in Alaska as well as the rest of the country.

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Mr. WHITFIELD. At this time, I would like to recognize the ranking member from the great State of Illinois, Mr. Rush, for 5 minutes.

OPENING STATEMENT OF HON. BOBBY L. RUSH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. RUSH. I want to thank you, Mr. Chairman. Mr. Chairman, while Democrats under President Obama's leadership have put forth a truly all-of-the-above energy agenda, it appears that my Republican colleagues are once again taking their cue from one of their most influential leaders, Sarah Palin, and reviving their simplistic "drill, baby, drill" energy agenda. Merely a few hours ago, after holding a partisan vote to do away with new projects under the DOE's loan guarantee program in the full committee yesterday, which would have invested Federal dollars into different types of renewable and clean energy projects to compete with the Republican Party favorite fossil fuel industry, the majority is here today holding a hearing on drilling on Federal versus private lands.

Never mind the fact that the Energy Information Administration has confirmed that domestic oil production in the U.S. has increased every year since 2008, that we are importing less oil than anytime in the past 13 years, and that American demand is actually lower now than it was a year ago. And, Mr. Chairman, it appears that my Republican colleagues will continue to ignore the fact that the U.S. has set more than 40,000 hot temperature records this year alone, and that the last 12 months have been the hottest ever recorded in our Nation's history.

Today, fully two-thirds of the country is experiencing drought, and 30 percent of the Nation's corn crop is in poor or very poor condition, while at the same time, water levels in four of the five Great Lakes have actually plummeted down to unprecedented levels due to high evaporation rates and insufficient rainfall. In fact, Mr. Chairman, just yesterday the Agriculture Department designated more than half of all U.S. counties as disaster areas in 2012. The main reason? Drought. And the Agriculture Secretary Vilsack signed a disaster designation for 218 counties in 12 States just yesterday morning, bringing the national percentages to 50.3 percent.

Mr. Chairman, might I remind you that today, more than 113 million Americans are living under extreme heat advisories, and yet, despite repeated requests from myself and Ranking Member Waxman to hold hearings on the science behind all of the extreme weather events associated with climate change that the Nation has been experiencing, we have yet to examine this vitally important issue just one time, just once this year, one time before this subcommittee.

Mr. Chairman, even former climate change skeptics such as Richard Muller, who penned in a July 28 New York Times editorial entitled "The Conversion of a Climate Change Skeptic," even Mr. Muller has now come out on the record and joined the overwhelming consensus of scientists and researchers who have stated that global warming is indeed occurring, and that human causes are indeed behind it. Yet as America burns, this committee fiddles.

Even as Congress prepares to vote on a bill, drought relief bill for farmers this morning, farmers who are suffering from record drought in the Midwest and beyond, even when you and I and the other members of this subcommittee, we will be casting votes sometime this morning, this very subcommittee refuses to hold one hearing, just one hearing on the causes behind these droughts, or what can be done for our Nation, for this Federal Government, for this Congress to lessen the impact of the heat on the American people.

Mr. Chairman, I support President Obama's all-of-the-above energy approach, which encompasses increased oil and gas production here in the U.S., additional conservation and energy efficiency measures, and a move towards cleaner air, renewable energy sources for the future, and I urge you once again, Mr. Chairman, I plead with you, let us hold a hearing on the science behind climate change. This is a matter of critical importance to the American people and to the future of farmers in our Nation, American consumers. This is an important matter. It is so important, Mr. Chairman, we can no longer afford to ignore it. I yield back.

Mr. WHITFIELD. Thank you very much, Mr. Rush.

At this time we will recognize the chairman of the full committee, Mr. Upton of Michigan, for 5 minutes.

OPENING STATEMENT OF HON. FRED UPTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. UPTON. Well, thank you, Mr. Chairman. There is a tale of two energy policies to be told in this country. There are the States where domestic oil and natural gas production is growing, and there are the States where it is stagnating. In some States, oil and natural gas output is sharply increasing on private and State-owned lands, but in others where this administration calls the shots on federally controlled lands and offshore areas, the news is not nearly as good. In fact, a recent CRS study finds that 96 percent of the increase in domestic oil supply since 2007 has come from non-Federal lands. Where production on State and private lands is up, we see the energy industry creating thousands of high paying jobs, revitalizing local economies, but where most of the oil and gas remains untouched beneath the ground or under the sea floor due to Federal access restrictions, the job potential remains largely unrealized.

Under one energy policy vision, we see State and local regs ensuring that energy production is done safely and that public health is protected. In the other, we see one excuse after another for preventing energy production entirely or subjecting it to years of unnecessary delays.

Today we are going to view these two energy policies through the prism of two States. We can look at the success story of North Dakota, where growing oil production on private, State, and tribal lands should serve as a model for the Nation, and we will compare it to States like Alaska where Federal control of energy-rich onshore and offshore areas means that drilling often gets blocked by bureaucrats in DC.

Alaska and other States are blessed with energy but cursed with Federal red tape, and that is why our committee has been a leader

on measures like the Domestic Energy and Jobs Act that will reduce the red tape and allow these States to replicate North Dakota's success. If we take the lessons from this tale of two energy policies and allow States like Alaska to harness their resources as they do in States like North Dakota, it would benefit the national economy, jobs, gas prices, energy security. It is a powerful story, and I thank the witnesses for coming to share it with us. Yield back.

[The prepared statement of Mr. Upton follows:]

Opening Statement of the Honorable Fred Upton
Subcommittee on Energy and Power
Hearing on "The American Energy Initiative: A Focus on Growing Differences for Energy Development on Federal vs. Non-Federal Lands"
August 2, 2012
(As Prepared for Delivery)

There is a tale of two energy policies to be told in this country. There are the states where domestic oil and natural gas production is growing, and there are the states where it is stagnating.

In some states, oil and natural gas output is sharply increasing on private and state-owned lands. But in others, where the Obama administration calls the shots on federally controlled lands and offshore areas, the news is not as good. In fact, a recent Congressional Research Service study found that 96 percent of the increase in domestic oil supplies since 2007 has come from non-federal lands.

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Alaska and other states are blessed with energy but cursed with federal red tape. That is why our committee has been a leader on measures like the Domestic Energy and Jobs Act that will reduce the red tape and allow these states to replicate North Dakota's success.

If we take the lessons from this tale of two energy policies and allow states like Alaska to harness their resources as they do in states like North Dakota, it would benefit the national economy, jobs, gasoline prices, and energy security. This is a powerful story, and I thank our witnesses for being here to tell it.

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Mr. WHITFIELD. Thank you very much. At this time, I recognize the gentleman from California, Mr. Waxman, for a 5-minute opening statement.

OPENING STATEMENT OF HON. HENRY A. WAXMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. WAXMAN. Thank you, Mr. Chairman. Today the subcommittee holds a hearing to compare oil and gas production on Federal lands to production on private lands. We will hear once again, as we just heard, that the Obama administration is hostile to oil and gas production, and we will hear once again that oil and gas production should be pursued at the expense of renewable energy and other goals.

Well, that is the rhetoric. Now here are the facts. Domestic oil and gas production has increased each year of the Obama administration, and it is the highest it has ever been in 8 years. America's dependence on foreign oil has gone down every single year for the last 3 years, and oil production from Federal lands is higher today than it was under the last 3 years of the Bush administration. It is true that oil production on private lands has increased more than it has on Federal lands.

Some Republicans have used this as evidence that the President must be disfavoring the oil industry, but the fact is that most of the increase in domestic oil production has occurred from developing shale formations. These formations happen to be on private lands. The Federal Government manages only a small portion of these areas.

For instance, the Bakken shale has made North Dakota one of the country's top States in oil production, but Federal lands make up a small percentage of it. Even offshore oil production remains strong. In spite of one of the world's worst environmental disasters, oil production from the Outer Continental Shelf in 2011 was equal to or higher than any of the last 3 years of the Bush administration. The Obama administration has taken many steps to facilitate oil and gas production. The Bureau of Land Management has reformed its leasing process with a tracking system for applications that shortens wait times. It has implemented a more inclusive stakeholder engagement that has lowered lease protests and appeals. The Forest Service has sent officials to drill-intensive areas to expedite the permitting process. Those are the facts, and they are completely contrary to the narrative that the Republican majority is trying to promote today.

But we shouldn't lose sight of the fact that public lands are not solely for oil and gas production. Our public lands are held in trust for the American people, not the oil companies. Public lands are used for conservation, outdoor recreation, watershed protection, timber, and grazing. They can also be used for renewable forms of energy. In fact, the Obama administration recently completed an assessment that will expedite permitting for solar installations on public lands in the Southwest. This has the potential to produce enough electricity to power 7 million homes. The administration's job is to balance these competing demands and, notwithstanding all the rhetoric we will hear today, I believe it is doing a good job.

But I want to refer my colleagues to a blog by Paul Krugman in The New York Times, a Nobel Prize winner, and he says in "When Scale Matters." "Judging from comments on my North Dakota post, there is a lot of confusion about when and why differences in scale make comparisons between economies invalid.

"The crucial thing to get is that size, per se, isn't the issue. It is whether what is going on in the small economy could be replicated in the large economy.

"I mean, we all know that airplane designs can be tested with miniature models in wind tunnels, that tsunamis can be modeled in tanks that fit in a large room and so on. Small-scale versions of big phenomena are perfectly OK. The baby-sitting co-op teaches us a lot about the global economic slump.

"But when you are looking at, say, a resource boom—which is what North Dakota is all about—you have to ask whether a comparable resource boom is possible in a much more populous state, or the United States as a whole. One commentator declared that there is as much oil under California as there is under North Dakota; quite possibly. The question is, how big a deal would extracting that oil be in a state with 50 times North Dakota's population; how much difference would it make to, say, the state unemployment rate? And the answer, of course, is virtually none. To have a North Dakota-type boom in California, you would have to find 50 times as much oil; to have it nationally, you'd have to find 500 times as much. Not likely.

"And this is how you want to think about other examples. Is Iceland too small to be a useful model for other crisis countries? Well, it could be; Iceland's export sector is, thanks to its small size, not very diverse, and if the recovery had been all about fish, or aluminum, it wouldn't be much of a lesson to anyone else. As it happens, however, that is not what it is about.

"I guess the general point is that when trying to learn from some country or region's experience, you should always ask, 'Is this place a reasonably good model for other places?' It's not a matter of head counts or acreage, it's about the story."

Mr. Chairman, this is our 27th hearing. You pointed out we are interested in energy production and the question of a struggling economy. Where are the hearings on global warming and climate change? They affect those two other issues as well, as many other matters that are affecting the American people. I yield back my time.

Mr. WHITFIELD. Thank you very much. And that concludes today's opening statements, and so at this time, I would like to introduce the members of the first panel, and first of all, we have with us this morning Mr. Michael Nedd, who is the Assistant Director of Minerals and Realty Management at the Bureau of Land Management; we have Ms. Mary Wagner, who is the Associate Chief of the U.S. Forest Service; and we have Mr. Adam Sieminski, who is the administrator of the U.S. Energy Information Agency.

I want to thank all of you for coming. We appreciate your being here very much, and we look forward to your testimony, and each one of you will be recognized for 5 minutes, and I know you have done this before, but there is a couple little boxes on the table, and when the time is up, the light will turn red, and while I won't cut

you off immediately, at least when you see red, you will recognize that, hey, I think my time is getting close to being up.

So, Mr. Nedd, we will recognize you first for a 5-minute opening statement.

STATEMENTS OF MICHAEL D. NEDD, ASSISTANT DIRECTOR, MINERALS AND REALTY MANAGEMENT, BUREAU OF LAND MANAGEMENT, DEPARTMENT OF THE INTERIOR; MARY WAGNER, ASSOCIATE CHIEF, FOREST SERVICE; AND ADAM SIEMINSKI, ADMINISTRATOR, ENERGY INFORMATION ADMINISTRATION

STATEMENT OF MICHAEL D. NEDD

Mr. NEDD. Good morning, Mr. Chairman and ranking members and members of the subcommittee. Thank you for the opportunity to discuss the role of the Bureau of Land Management in facilitating responsible development of oil and gas resources from our Nation's public land. The BLM is responsible for protecting the resources and managing the use of our Nation's public land on over 245 million surface acres, approximately 700 million acres of onshore subsurface mineral estate, and 56 million acres of Indian trust land. We work closely with State governments and other Federal agencies in the management of this subsurface mineral estate.

The BLM manages public lands on very complex, multiple use mandate from Congress, and consider a wide variety of factors in land management decisions, including industry interests, conservation value, as well as other potential use of the public lands.

In addition to oil and gas production, the BLM's unique multiple use management of public lands also includes activities such as livestock grazing, outdoor recreation, solid minerals development, and the conservation of natural, historical, cultural, and other important resources.

Secretary Salazar has emphasized that the development and production of conventional energy resources from BLM-managed public and Indian lands, are an important component of the new energy frontier and play a critical role in meeting the Nation's energy needs. In 2011, conventional energy development from public and Indian trust land produced 14 percent of the Nation's natural gas, 6 percent of its domestically-produced oil. In fiscal year 2011, onshore Federal oil and gas production resulted in nearly $2.9 billion in royalties, approximately half of which was paid directly to the States in which the development occurred.

The geography of resource occurrence and the relative economic attractiveness of development are key factors impacting discoveries and production level on both Federal and non-Federal lands. Currently, there are more than 37 million acres of public lands that are leased for oil and gas development. Only about 12 million acres are under production. There are huge potential oil and natural gas plays in the Marcellus, Fayetteville, Barnett, Niobrara, and Bakken shale formation where there is an abundance of oil and gas. These geological formations exist largely on State and private minerals estate. The fact that only one-third of Federal leases are in production may be partly attributable to the abundance of oil

and gas in these shale formations on the State and private land and to low natural gas prices relative to the price of oil.

The BLM is working on a variety of fronts to ensure that development occurs efficiently and responsibly, including implementing leasing reform, implementing a new automated tracking system designed to expedite the review for a drilling permit, improving inspection, enforcement, and production, accountability, reviewing hydraulic fracturing policies and practices, and carefully planning for development in the National Petroleum Reserve in Alaska.

Leasing reform is designed to provide greater predictability and certainty that those leases will ultimately be developed and produced. The leasing reform also provides more certainty to industry by enhancing the BLM's ability to resolve protests prior to lease sales. BLM's ongoing effort to ensure efficient processing of oil and gas permit applications on both Indian trusts and Federal lands, the BLM will implement a new automated tracking system that is expected to reduce the review period for drilling permits.

The BLM continues to work to strengthen its oil and gas inspection, enforcement, and production accountability program. These inspections ensure that leases meet important environmental and safety requirements, and that the reported oil and gas volumes matches actual production. Increases in oil and gas production nationwide are the result of improved drilling and hydraulic fracturing technique. As part of the Department's effort to ensure that oil and gas development is taking place on public land in a responsible and environmentally sustainable manner, the BLM proposed measures to create a consistent framework to strengthen the requirements for hydraulic fracturing performed on Federal and Indian trust land and protect the health of communities.

Mr. Chairman, thank you for the opportunity to testify. I will be happy to answer any questions you may have.

Mr. WHITFIELD. Thank you, Mr. Nedd.

[The prepared statement of Mr. Nedd follows:]

Statement of
Michael D. Nedd
Assistant Director
Minerals and Realty Management
Bureau of Land Management
U.S. Department of the Interior

Before the
House Energy and Commerce Committee
Subcommittee on Energy and Power

"The American Energy Initiative -- The Growing Differences for Energy Development on Federal vs. non-Federal Land"

August 2, 2012

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to discuss the role of the Bureau of Land Management (BLM) in the Administration's efforts to facilitate responsible development of oil and gas resources from our nation's public lands.

The BLM, an agency of the U.S. Department of the Interior (Department), is responsible for protecting the resources and managing the uses of our public lands, which are located primarily in 12 Western states, including Alaska. The BLM administers more land – over 245 million surface acres – than any other Federal agency. The BLM also manages approximately 700 million acres of onshore subsurface mineral estate throughout the Nation, and carries out the Secretary's mineral operations on 56 million acres of Indian trust lands. We work closely with state governments and other Federal agencies in the management of this subsurface mineral estate. In addition to oil and gas production, the BLM's unique multiple-use management of public lands also includes activities as varied as livestock grazing, outdoor recreation, solid mineral development, and the conservation of natural, historical, cultural, and other important resources.

Background

Secretary Salazar has emphasized that the development and production of conventional energy resources from BLM-managed public lands are an important component of the new energy frontier, and play a critical role in meeting the Nation's energy needs. Facilitating the efficient, responsible development of domestic oil and gas resources is part of the Administration's broad energy strategy that will help protect consumers and help reduce our dependence on foreign oil, and the BLM has taken a number of steps to fulfill this strategy.

The BLM currently manages nearly 37 million acres of onshore oil and gas leases. In FY 2011, over 117 million barrels of oil were produced from public and Indian lands. In addition, the nearly 3 trillion cubic feet of natural gas produced from public lands made 2011 the second-most productive year for natural gas production on record. Natural gas production on BLM lands increased by 6 percent during 2009-2011, compared with 2006-2008. In 2011, conventional energy development from public and Indian lands produced 14 percent of the Nation's natural

gas, and 6 percent of its domestically produced oil. In Fiscal Year (FY) 2011, onshore Federal oil and gas production resulted in nearly $2.9 billion in royalties, approximately half of which was paid directly to the states in which the development occurred.

Well-paying jobs are often associated with energy and mineral exploration and development. These jobs provide needed revenues and economic activity to communities. The BLM's management of energy and mineral resources results in extraordinary economic benefits to local communities and to the Nation, helping to contribute more than $140 billion annually to the national economy and supporting more than 650,000 American jobs according to the Department of the Interior Economic Contributions report of July 9, 2012.

There are a number of differences in the way oil and gas development and production occurs on Federal lands, as compared to development and production on private or State mineral estate. The BLM manages public lands under a complex "multiple-use" mandate from Congress. By contrast, the standards on state or private lands are often different and may be focused more on a single use. The BLM considers a wide variety of factors in land management decisions, including industry interest, conservation values, protection of the environment, as well as other potential uses of the public lands, such as outdoor recreation. These lands and resources belong to the public and, as directed by law, the BLM places a high priority on requiring that energy leasing and development are conducted in an environmentally-sound manner while balancing other multiple uses and resource values.

In addition to the multiple uses of the public lands, the BLM complies with a variety of statutes that are not necessarily applicable to state or private lands, such as the National Environmental Policy Act (NEPA) and the National Historic Preservation Act. The NEPA process, in combination with the BLM land use planning process, provides important opportunities for the public to provide input concerning the management of these public resources.

Given the checkerboard ownership patterns of many public lands in the West, as well as the significant portfolio of split estate ownership, the BLM also must coordinate with other landowners and land managers. Of the 700 million acres of mineral estate managed by the BLM, 57 million acres are under surface acres that belong to private entities, and a significant number of acres are under surface managed by other Federal agencies. It is important that the BLM provide not only the public an opportunity to engage on these issues, but also neighboring landowners.

Multiple factors affect levels of production from Federal lands and the Federal mineral estate. Scale is one such factor. On public lands in the western United States, industry may propose one well or a large-scale development which may eventually lead to thousands of wells. If the BLM approves a proposed large-scale development, marked increases in production may occur in that area. For example, the BLM recently issued decisions for large oil and gas field developments in the Greater Natural Buttes and Gasco areas of northeastern Utah. These two projects open the way for thousands of new wells to be developed on public lands over the coming years, which will likely affect the pace and level of production in the region.

The geography of resource occurrence and the relative economic attractiveness of development (which can depend on numerous market forces and technological changes) are also key factors impacting discoveries and production levels on both Federal and non-Federal lands. For example, huge potential natural gas plays in the Marcellus, Fayetteville, Barnett, Niobrara and Bakken shale formations are attracting significant development interest. Industry might consider these gas resources attractive for a number of reasons. All of these geologic formations exist largely on state and private mineral estates, sometimes near populous markets, and do not underlie large expanses of Federally-managed lands in the West, which are also generally more gas-prone.

Given the current technology and industry interest in developing natural gas, these unconventional shale oil and gas formations, mostly on non-Federal mineral estate, are proving to be very productive, possibly impacting demand on Federal lands. Although the BLM has issued oil and gas leases that are still in effect on more than 37 million acres of public lands – comprising a large percentage of BLM acreage that could yield hydrocarbons – only about 12 million acres are in production.

Moving Forward

All these factors can have an effect on production numbers in a geographic area and across markets from year to year. However, much can and has been done to improve agency processes in managing oil and gas production on Federal lands. As part of the President's all-of-the-above energy strategy, the BLM is working on a variety of fronts to ensure that development occurs efficiently and responsibly – including implementing leasing reforms; implementing a new, automated tracking system designed to reduce the review period for drilling permits by two-thirds and expedite the sale and processing of Federal oil and gas leases; improving inspection, enforcement, and production accountability; reviewing hydraulic fracturing policies and practices; and carefully planning for development in the National Petroleum Reserve in Alaska (NPR-A).

Leasing Reforms

Oil and gas production from Federal lands begins with the acquisition of Federal oil and gas leases. Leasing reform is designed to provide greater predictability and certainty that those leases will ultimately be developed and produced. Prior to implementation of the Secretary's leasing reforms in 2010, 47 percent of lease parcels were protested, resulting in a backlog of pending parcels awaiting adjudication. The BLM invested vast amounts of staff time and attention in defending time-consuming and costly lawsuits and appeals, and revisiting the leasing process after receiving direction from the courts.

The leasing reforms implemented in 2010 provide more certainty to industry by enhancing the BLM's ability to resolve protests prior to lease sales. The agency is taking a front-loaded approach and is vetting parcels thoroughly prior to lease sales, including offering an increased opportunity for public participation and a more thorough environmental review process and documentation.

The BLM has recently seen a 50 percent jump in industry proposals to lease for oil and gas exploration, with oil and gas companies nominating nearly 4.5 million acres of public minerals

for leasing in 2011. This is up from fewer than 3 million acres nominated in the previous year. The BLM's leasing reforms require adequate planning and analysis to identify potential areas where the leasing would not compromise the BLM's multiple-use land management mission, and include greater public participation, on site visits to potential lease tracts, and interdisciplinary review of available information. In 2011, lease protests fell below 36 percent, and the BLM believes that these reforms will result in fewer protests and therefore quicker approval in the future.

The Department held 32 onshore oil and gas lease sales during calendar year 2011, offering 1,755 parcels of land covering nearly 4.4 million acres. In total, 1,296 parcels of land were leased generating approximately $256 million in revenue for American taxpayers – a nearly 20 percent increase in lease sale revenue over 2010 levels.

Automated Tracking Systems / Permitting

On April 3, 2012, at Fort Berthold in North Dakota, Secretary Salazar unveiled initiatives to expedite safe and responsible leasing and development of domestic energy resources on U.S. public and Indian trust lands. As part of the BLM's ongoing effort to ensure efficient processing of oil and gas permit applications on both Indian trust and Federal lands, the agency will implement a new automated tracking system that is expected to reduce the review period for drilling permits. The new system will track permit applications through the entire review process, quickly flagging missing or incomplete information, and reducing the back-and-forth between the BLM and industry applicants, which is currently needed to ensure that applications processed by the BLM are complete. This initiative comes as part of the Department's efforts to continually meet increased demands for oil and gas development on public and Indian lands across the country.

As the demand for drilling permits increases, the BLM is adjusting its staffing capabilities to provide for timely processing of industry applications for permits to drill (APD). The BLM processed approximately 5,200 such permits in Fiscal Year 2011. As of July 7, 2012, the BLM has received over 4,100 APDs (Federal and Indian lands), and has processed over 4,400 received and pending APDs (Federal and Indian lands). About 6,700 APDs on BLM and Indian lands have been approved by BLM, but not yet drilled by industry as of May 30, 2012.

Inspection, Enforcement, & Production Accountability

Of paramount importance to the BLM is a commitment to ensuring oil and gas production is carried out in an environmentally responsible manner. We continue to work to strengthen our oil and gas inspection, enforcement, and production accountability program. As part of this effort, the BLM has developed a strong technical certification program for all of our oil and gas field inspectors, who completed over 33,000 inspections in FY 2011. These inspections ensure that lessees meet important environmental and safety requirements, and that the reported oil and gas volumes match actual production. The BLM also has begun using a risk-based inspection strategy for production inspections, inspecting first those leases that present the highest risk. The BLM plans to expand this risk-based strategy to the other types of inspections it performs with the goal of maximizing the efficient use of inspection staff to meet inspection goals and requirements.

Hydraulic Fracturing

Increases in oil and gas production nationwide are the result of employing improved drilling and hydraulic fracturing techniques. These techniques stimulate natural gas production and have been the subject of increasing interest in the past few years. The Department has been monitoring the developments around hydraulic fracturing and is proactively engaging the public, states, tribes, and industry on this important topic.

As part of the Department's proactive efforts to ensure that oil and gas development is taking place on public lands in a responsible and environmentally sustainable manner, the BLM held a series of regional public forums in April 2011 to discuss the use of hydraulic fracturing. The sessions were held in North Dakota, Colorado, and Arkansas—states that have experienced significant increases in natural gas development on Federal lands or on leases issued by the BLM. Issues raised by members of the public and panel members included best management practices, disclosure of the chemicals used in hydraulic fracturing fluids, well construction and integrity, production wastewater management, and other techniques for protecting drinking water resources.

The BLM has proposed measures to create a consistent framework across BLM-managed lands in many states, to strengthen the requirements for hydraulic fracturing performed on Federal and Indian trust lands and protect the health of American communities. Straightforward measures outlined in the proposed rule include disclosure of the chemicals used in hydraulic fracturing operations; assurance of wellbore integrity; and water management requirements that would apply to the fluids that flow back to the surface after hydraulic fracturing has taken place.

The BLM developed the proposed rule with an eye toward improving public awareness and oversight without introducing complicated new procedures or delays in the process of developing oil and gas resources on public and Indian lands. The BLM's proposal was released on May 11, 2012, and seeks to create a consistent oversight and disclosure model that will work in concert with other regulators' requirements while protecting Federal and tribal interests and resources. The BLM extended the comment period on the proposed rule until September 10, 2012.

National Petroleum Reserve in Alaska (NPR-A)

The National Petroleum Reserve in Alaska (NPR-A) is a vast area of nearly 23 million acres on the North Slope of Alaska that has Federal production potential. In 2010, the U.S. Geological Survey estimated that 896 million barrels of conventional, undiscovered technically-recoverable oil and 53 trillion cubic feet of conventional, undiscovered technically-recoverable gas were within NPR-A and adjacent state waters.

A balanced and careful approach to energy exploration and development in the Arctic must account for a range of factors, including resource potential; environmental needs; and the social, cultural, and subsistence needs of Alaska Native communities. Through a careful public planning process, the BLM has in place an active leasing program in the NPR-A with nearly 1.5 million acres currently under lease. The BLM is committed to holding annual lease sales in the NPR-A and will hold the next lease sale in November, 2012. The most recent lease sale, which was held by the BLM in December, 2011, resulted in new leases for nearly 120,000 acres of the area and generated $3.6 million in total bids. Later this year, DOI will finalize an integrated

activity plan that will guide future sales in the NPR-A, while providing for adequate consideration and protection of the Reserve's outstanding ecological and subsistence resources. Further, the BLM's planning process for the entire NPR-A will help identify long-term leasing and infrastructure goals to support both onshore and offshore oil and gas development as well as resource conservation goals.

Conclusion

Consistent with the framework presented by the President's *Blueprint for a Secure Energy Future*, the BLM is working to secure the Nation's energy future by ensuring the potential oil and natural gas development on our public lands is realized. We are pursuing the safe, responsible, and efficient development of energy resources here at home. The Administration has taken a number of steps to accelerate safe and responsible oil and gas development and production on public lands, as part of the President's all-of-the-above energy strategy.

The BLM is committed to encouraging responsible energy development on the public lands and to ensuring that the American people receive a fair return for the public's resources. We are mindful of our responsibility for stewardship of natural resources and public assets that generate substantial revenue from Federal onshore oil and gas royalties directed to the U.S. Treasury and to the states, and which provide well-paying jobs in local economies. Mr. Chairman, thank you for the opportunity to testify on the BLM's oil and gas program policies and activities. I will be pleased to answer any questions you may have.

Mr. WHITFIELD. And Ms. Wagner, you are recognized for a 5-minute opening statement. I also want to just make a comment that I really appreciate the great job you all do managing the Land Between the Lakes and national forests, 170,000 acres. We appreciate the good job you do there.

STATEMENT OF MARY WAGNER

Ms. WAGNER. Thank you, Mr. Chairman. Good morning, and members of the committee as well. I appreciate the opportunity to offer just a few brief points this morning on oil and gas development on national forests.

Congress entrusted the Secretary of Agriculture with broad powers to protect and administer the national forest system by passing laws such as the Organic Act, the Multiple Use Sustained Yield Act, and the National Forest Management Act. The Multiple Use Sustained Yield Management Act established multiple use as the foundation for management of national forest and grasslands, calling for management of various uses in a combination that best meets the needs of the American people.

The people that we serve want many things from our forests: Clean air, clean water, timber, forage, fish and wildlife habitat, opportunities for outdoor recreation, and the topic of this hearing today, oil and gas resources. Congress also enacted laws giving us the basic framework for making decisions. The National Environmental Policy Act instructs agencies to assess environmental effects of proposed actions before we make decisions. NEPA's major purposes include disclosure of environmental effects, involvement of the public, and making informed decisions based on environmental analysis, which often includes mitigation for the proposed action of the project implementation.

The Forest Service is committed to effectively managing mineral resources to facilitate energy transmission in a responsible manner and to sound development of renewable and nonrenewable energy. Currently, we have authorized almost 20,000 active wells on national forest system lands in 19 States, and there are over 7,000 oil and gas leases covering 5.5 million acres on national forests and grasslands. While overall production of oil and gas from national forests is relatively small, it is an important economic and job-producing driver. The value of all energy and mineral production from national forests exceeds $6.5 billion per year, and mineral and energy development on national forests support an average of 110,000 jobs. This employment is keenly important to local communities and the Nation.

Oil and gas development is an important component of the Nation's energy portfolio, with potential to advance our Nation's energy security, improve air quality, and create jobs. The responsibility of the Forest Service is to safely and responsibly develop these resources in a way that ensures the well-being of surrounding communities and protects our landscapes and watersheds.

I look forward to working together to ensure the stewardship of our Nation's forests and grasslands continues to meet the desires and expectations of the American people. I look forward to answering your questions.

Mr. WHITFIELD. Thank you very much, Ms. Wagner.
[The prepared statement of Ms. Wagner follows:]

Statement of
Mary Wagner
Associate Chief, U.S. Forest Service
U.S. Department of Agriculture

Before the

Subcommittee on Energy and Power
Committee on Energy and Commerce
U.S. House of Representatives

August 2, 2012

Concerning

The American Energy Initiative: Oil and Gas Development on Federal Lands versus Private Lands

Mr. Chairman and members of the Subcommittee, thank you for the opportunity to appear before you today to provide the agency's perspective regarding oil and gas development on the National Forests and Grasslands.

We would like to describe the role of the Forest Service in oil and gas leasing and operations and provide an overall scope of the oil and gas program on the National Forest System (NFS) lands. The Forest Service is committed to doing its part to foster and encourage private enterprise in meeting the nation's energy needs, while at the same time protecting the landscapes and watersheds for present and future generations.

Oil and gas development is one of a variety of renewable and non-renewable energy development activities authorized on the National Forests and Grasslands. NFS lands provide 25 percent of the nation's coal production (Energy Information Administration,

Annual Coal Report 2009 – 2010) and 16,000 megawatts of hydropower generation capacity (U.S. Forest Service, FERC licensing records), enough to power twelve to sixteen million homes (National Hydropower Association estimate). The Forest Service authorizes uranium mining, geothermal development, and biomass removal for power generation. The Forest Service also authorizes a number of active mines which produce minerals needed for energy development and transmission (such as copper). The agency also authorizes thousands of miles of electric transmission and pipelines that distribute energy to market.

Specific to oil and gas, we have authorized almost 20,000 active wells on NFS lands in 19 states. While all of these wells are located on surface managed by the Forest Service, their production may be from either federally-owned or privately-owned, sub-surface minerals.

In 2009 and 2010, oil and gas production from federally-owned minerals on NFS lands generated an estimated $136 million and $186 million respectively in bonus and royalty payments to the U.S. Treasury. In 2010, this production had a market value of $1.2 billion, and generated tens of thousands of direct jobs. A large portion of the royalty revenue is collected for and delivered to states and counties. Specifically 25 percent of the revenue from Acquired Lands, which includes the National Grasslands, as well as 50 percent of the revenue from Public Domain lands, is delivered to the states and counties.

Almost three-fourths of the approximately 20,000 wells on NFS lands overlie subsurface mineral estate that is privately held. This "split estate" development predominately occurs

on NFS land in the east. The majority of these wells are low volume producers with typical depths between 2,000 and 3,000 feet which require small areas of surface occupancy (pads) of an acre or less. National Forests in the east also have significant development potential for shale gas. We do not have information on the volumes or value of oil and gas produced from privately-owned minerals on NFS lands.

Although most of the oil and gas wells on NFS lands are in the east, most of the oil and gas production is in the west; most notably in the Williston Basin with its Bakken Formation in North Dakota on the Dakota Prairie National Grassland, and the San Juan basin in northwestern New Mexico on the Carson National Forest. It is common practice in these areas to utilize larger pads (typically 3-5 acres) to drill multiple wells to minimize the surface "footprint" of development. On the Dakota Prairie National Grasslands, we approved 14 surface use plans of operation in 2008, 13 plans in 2009, 29 plans in 2010, and 36 plans in 2011. One of the challenges in being responsive on the Dakota Prairie National Grasslands has been our ability to hire, provide housing and retain employees to work in the same geographic area which is experiencing the oil and gas boom. We are working diligently to address this challenge.

There are a number of factors which influence where, when, and how oil and gas is developed on NFS lands. The level of interest from industry is largely a function of available supply as well as the economics of development, from prices to the cost of extraction. This cost is highly variable and depends upon the deposit, drilling technique to access the deposit, and transportation costs among many other factors.

Under the Federal Onshore Oil and Gas Leasing Reform Act of 1987 (30 U.S.C. 226) and the implementing regulations (36 CFR 228.102), the Forest Service makes decisions on availability or access to *federally* held subsurface resources underlying NFS lands at two stages: leasing and permitting. At the leasing stage, a National Forest analyzes which lands the Agency will make available for leasing and under what conditions. This is done through National Environmental Policy Act (NEPA) environmental analyses which include significant public involvement. In conducting the environmental analyses, the Forest Service focuses on potential impacts to the surface while the BLM focuses on subsurface aspects. At the permitting stage, the agency again conducts environmental analyses, focusing on site-specific surface impacts associated with the proposed Surface Use Plan of Operations. The Forest Service is able to utilize expeditious review processes (categorical exclusions) in certain situations. These analyses include public involvement, and provide the specific conditions of approval to the operator or lease holder for accessing and developing their deposit. Again, at the permitting stage, where the subsurface estate is *federally* owned, we work closely with the BLM in coordinating the analyses and public involvement in accordance with a national Memorandum of Understanding. Currently there are over 7,000 oil and gas leases covering approximately 5.5 million acres on the National Forests and Grasslands.

Congress designated the first National Forests in order to protect our nation's watersheds and ensure a sustainable supply of timber. Over half of the municipal water west of the Mississippi originates on the National Forests. Today there are National Forests and

Grasslands in 43 states and together the collective land mass is larger than the states of California and Oregon combined. Almost 170 million people each year recreate on the National Forests and while they are working forests, they are also home to incredible and abundant wildlife, important historical and archeological sites, and breathtaking landscapes. In order to permit resource use, while conserving the forests, Congress has put in place laws to guide the agency in managing resource extractive activities.
The Forest Service is committed to balancing its role in helping to meet the nation's energy needs while also conserving the National Forests for all of the uses for which Americans desire - for this generation and future generations.

This concludes my statement and I would be happy to answer any questions you may have.

Mr. WHITFIELD. And Mr. Sieminski, you are recognized for 5 minutes.

STATEMENT OF ADAM SIEMINSKI

Mr. SIEMINSKI. Mr. Chairman, members of the subcommittee, I am really pleased to have the opportunity to appear before you today. Although I have testified here in the past, this is my first congressional hearing as EIA administrator. The Energy Information Administration is a statistical and analytical agency within the Department of Energy. By law, its data, analyses, and forecasts are independent of approval by any other officer or employee of the U.S. Government. Yesterday, EIA released its 2010 report on U.S. crude oil and natural gas reserves. The numbers are big.

Net additions to oil and gas proved reserves were, by a large margin, the highest ever recorded since EIA began publishing proved reserve estimates in 1977. Oil proved reserves increased by 12.8 percent during 2010 to 25.2 billion barrels, led by Texas, North Dakota, and the Federal Gulf of Mexico. U.S. proved reserves of wet natural gas increased by 12 percent, ending the year above 300 trillion cubic feet for the first time ever. Texas, Louisiana, and Pennsylvania had the largest increases. One observation worth noting in figure 5 of my testimony is that the Nation's shale resource basins, which have been mainly responsible for the increases, are largely located outside of Federal lands.

Moving to current production, EIA estimates that oil production in the U.S. averaged 6.2 million barrels per day during the first 5 months of this year, the highest level since 1998. The tight oil plays in North Dakota and Texas are leading the charge in this gain. EIA forecasts that 6.7 million barrels per day of oil output will be seen in 2013. Oil production on non-Federal lands increased by 385,000 barrels a day last year, again, largely because of the tight oil plays in North Dakota and Texas. This level of output currently stands at about 4 million barrels a day. Oil production from Federal lands is dominated by the Outer Continental Shelf, which is driven by the timing of major deepwater development projects. After increasing for several years to reach 2 million barrels a day, production decreased in the aftermath of the 2010 Macondo blowout in the Gulf of Mexico, currently stands a bit under 2 million barrels a day.

U.S. natural gas production has been driven upward recently by shale gas, especially the liquids-rich production areas such as the Eagle Ford in Texas and the wet areas of the Marcellus shale formation in Pennsylvania. EIA expects continued growth in gas production in 2012 and 2013, though not as strong as the 2010 to 2011 period because of lower natural gas prices. Current total U.S. gas production is over 68 billion cubic feet per day. Production of natural gas on non-Federal lands has increased steadily by over 16 billion cubic feet a day across the last 6 years, led by shale resources to surpass 50 bcf a day.

Meanwhile, Federal offshore natural gas production has been on a downward trend for the last 9 years, falling by more than 50 percent, as commercial development moved from the gas-prone shallow shelf areas in the Gulf of Mexico to the richer oil-prone deep waters

further out in the Gulf. Production from onshore Federal lands was generally growing over this period and actually exceeded the offshore production by 2008.

EIA estimates for the non-Federal oil production are based on monthly data from State agencies and purchased third-party data. The lag from when the data are first reported to the time that they stop changing significantly varies from State to State. A few States, like North Dakota and Alaska, report relatively complete data within 2 months of the close of the production month. Other States with large numbers of producers, like Texas and Oklahoma, can take a year or two to report complete data. For the Federal offshore area, EIA relies on the metered data from the Department of the Interior.

Unlike oil production, EIA collects data on natural gas production from about 240 operators each month. This EIA survey primarily covers five States and the Federal offshore Gulf of Mexico. Though more accurate than the oil production estimates, the current natural gas monthly production survey does not collect data on Federal lands or from some of the emerging shale States like Arkansas and Pennsylvania. In its Federal year, fiscal year 2013 budget, EIA has proposed a small increase in funding to improve the timeliness and accuracy of all of the oil and natural gas production data. This proposal would increase data quality as well as enable EIA to identify and report these trends affecting the Nation much sooner.

Finally, Mr. Chairman, I want to highlight for the committee members the importance of technically recoverable resources, also known as TRR. This is a common measure of the long-term viability of U.S. domestic oil and natural gas as an energy source. These important estimates are a work in progress. They change with production experience as new production technologies are applied to these resources. The uncertainties and complications associated with these estimates are discussed in my written testimony. Thank you very much for the opportunity to testify before you today, and I look forward to your questions.

Mr. WHITFIELD. Thank you, Mr. Sieminski.

[The prepared statement of Mr. Sieminski follows:]

Summary of Statement of Adam Sieminski, EIA Administrator, August 2, 2012

Oil and Gas Reserves - EIA is releasing the 2010 *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Proved Reserves* report. Net additions to proved reserves were the highest recorded since EIA began publishing estimates in 1977. Proved oil (crude and condensate) reserves - led by Texas, North Dakota, and the Gulf of Mexico Federal Offshore - increased by 13 percent ending at 25.2 billion barrels. Proved reserves of wet natural gas increased by 12 percent, ending the year over 300 Tcf for the first time. Texas, Louisiana, and Pennsylvania had the largest increases.

Production - U.S. oil (crude and lease condensate) production during the first 5 months of 2012 averaged 6.2 million barrels per day (bbl/d), the highest since 1998, led by tight oil plays from North Dakota and Texas. The EIA 2013 forecast is for another 410,000 bbl/d; onshore oil-directed drilling rigs have doubled in the last 18 months. Natural gas production has increased because of production of liquids rich shale gas areas such as the Eagle Ford and wet areas of the Marcellus Shale as well as associated gas from the growth in domestic oil production.

Differences between Federal and Non-Federal Lands - The shale resource basins are largely outside of the Federal lands, so is shale production. Oil production on non-Federal lands increased year on year because of the tight oil plays of North Dakota and Texas. Oil production from Federal lands is dominated by offshore which has been lower since the 2010 Macondo blowout in the Gulf of Mexico. Natural Gas production on non-Federal lands has increased steadily over the last 6 years, largely because of shale gas resources. Natural gas production from Federal lands has decreased each year since FY2003 as production has declined in the Federal OCS as industry has moved from the gas prone shelf to the oil prone deep waters. Production from onshore Federal lands has been growing, exceeding offshore. Decline in natural gas prices has reduced the attractiveness of conventional resources on Federal land.

Resource Projections - The Annual Energy Outlook 2012 projections were based on a natural gas resource estimate of 2,203 trillion cubic feet of technically recoverable resources. These estimates are a "work in progress," changing as more production experience becomes available and as new production technologies are applied to these resources. The uncertainties are complicated by three factors. First, most shale gas and tight oil wells are only a few years old, and their long-term productivity is untested. Second, many shale formations - for example, the Marcellus shale - are so large that only a portion of the formation has been extensively production tested. Third, changes in technology and management practices will occur that cannot be anticipated. These changes can make future wells more productive and less costly.

STATEMENT OF ADAM SIEMINSKI

ADMINISTRATOR

ENERGY INFORMATION ADMINISTRATION

U.S. DEPARTMENT OF ENERGY

before the

SUBCOMMITTEE ON ENERGY AND POWER COMMITTEE ON ENERGY AND COMMERCE

U. S. HOUSE OF REPRESENTATIVES

AUGUST 2, 2012

Mr. Chairman and Members of the Subcommittee, I appreciate the opportunity to appear before you today to address the outlook for oil and gas reserves and production and the differences between Federal and non-Federal lands.

The U.S. Energy Information Administration (EIA) is the statistical and analytical agency within the U.S. Department of Energy. EIA collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding regarding energy and its interaction with the economy and the environment. EIA is the Nation's premier source of energy information and, by law, its data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views expressed herein should therefore not be construed as representing those of the Department of Energy or any other Federal agency.

My testimony today addresses technically recoverable resources, proved reserves, and current production of hydrocarbons – crude oil, lease condensate, natural gas, and natural gas liquids (NGLs). Technically recoverable resources are an estimate of hydrocarbons that are producible using currently available technologies and industry practices from both discovered resources and estimated potential resources without regard to economic considerations. Estimates of technically recoverable resources, while inherently uncertain, are an important input to EIA's energy projections. Proved reserves are estimates of hydrocarbons that geologic and engineering data demonstrate with reasonable certainty can be recoverable from identified fields under existing economic and operating conditions. Each spring, EIA collects estimates of proved reserves at the end of the prior year from both public and private operators. Publicly-

traded companies also report proved reserves to the Securities and Exchange Commission. Production data are also a major focus of EIA's energy information program. The data and estimates we develop and disseminate reflect a combination of survey data collected directly from operators and information provided by other Federal agencies and the States.

I. RESERVES

This week, EIA is releasing its summary report on U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Proved Reserves as of the end of 2010. As noted in EIA's April 28, 2011, press release the FY 2011 enacted budget cut to the President's budget request, resulted in delay of EIA's processing of this data. The year-end 2011 reserves surveys are being collected; we hope to publish them by the first quarter of next year.

For each fuel, net additions to proved reserves, which reflect the volume of reserves added during 2010 after subtracting the year's production, were--by a large margin--the highest ever recorded since EIA began publishing proved reserves estimates in 1977.

Crude oil (including lease condensate) proved reserves increased by 2.9 billion barrels (12.8 percent) during 2010 ending that year at 25.2 billion barrels (Figure 1). Texas, North Dakota, and the Gulf of Mexico Federal Offshore had the largest increases in oil proved reserves in 2010 (Figure 2). An increase in the oil price boosted oil reserves in States with large producing oil fields. The average WTI spot price used for reserves reporting was $79.79 per barrel in 2010 compared with $61.08 in 2009.

U.S. proved reserves of wet natural gas increased by 33.8 trillion cubic feet (Tcf) (11.9 percent) during 2010, ending that year at 317.6 Tcf (Figure 3). Texas, Louisiana, and Pennsylvania had the largest increases (Figure 4). The average annual spot price at Henry Hub used for estimating reserves rose from $3.83 per million British thermal units (MMBtu) in 2009 to $4.39 per MMBtu in 2010.

The increasing ratio of oil to natural gas prices led operators to focus on "liquids-rich" areas in natural gas formations--a move that has continued over the last 18 months as the oil-to-natural-gas price ratio has further increased. This "liquids boost" is especially important in the development of unconventional resources (such as shale gas) because of the relatively high cost of drilling and completing horizontal wells. Because NGLs sell at a premium to natural gas, the high liquids content of certain shale formations helps operators to profitably develop shale gas resources during periods of low natural gas prices.

These NGLs are extracted at gas separators and at natural gas processing plants and some of the heavier components are blended into the liquid hydrocarbon steam. Generally, natural gas liquids include lease condensate and natural gas plant liquids. In the report, the condensate reserves are included in the oil reserves discussed above, while the natural gas plant liquid reserves are included in the wet natural gas reserves discussed above. EIA also provides separate estimates of lease condensate and natural gas liquids.

U.S. lease condensate proved reserves increased from 1,633 million barrels in 2009 to 1,914 million barrels in 2010, a 17 percent increase driven primarily by extensions, which are reserve additions that result from additional drilling and exploration in previously discovered reservoirs.

By a considerable margin, Texas had the largest increase in lease condensate proved reserves in 2010 (192 million barrels), followed by North Dakota and Oklahoma. In these (and other) States, additions to lease condensate proved reserves can be closely linked to expanding drilling programs in liquids-rich portions of shale and other tight formations, such as the Eagle Ford in Texas and the Bakken in North Dakota. Lease condensate comprised 7.6 percent of total oil proved reserves in 2010.

U.S. natural gas plant liquids proved reserves rose from 8,557 million barrels in 2009 to 9,809 million barrels in 2010, an increase of 15 percent. Texas had the largest volumetric increase in natural gas plant liquids proved reserves in 2010, followed by Oklahoma and Colorado. As is the case with lease condensate, increasing proved reserves of natural gas plant liquids is associated with escalating drilling activity in shale formations, including the Barnett in Texas and Woodford in Oklahoma.

The application of horizontal drilling and hydraulic fracturing in shale and other very low permeability ("tight") formations has played an important role in the growth of both oil and natural gas reserves. Proved natural gas reserves have grown dramatically since the mid 2000s, in step with intensifying horizontal drilling programs. For crude oil the dramatic impact from technology onshore has been more recent. Nevertheless, tight oil developments have contributed significantly to the reversal of more than two decades of generally declining U.S. proved oil reserves. For both oil and natural gas, these reserves increases underscore the potential of a growing role for domestically-produced hydrocarbons in meeting both current and projected U.S. energy demands.

One observation we have made is shown clearly in Figure 5. Because the shale resource basins are largely outside of the Federal lands, so too is shale production. In this case, the geology is working in favor of non-Federal landowners.

II. TRENDS IN TOTAL U.S. OIL AND NATURAL GAS PRODUCTION

Moving to production, EIA's estimate of U.S. oil (crude and lease condensate) production during the first 5 months of 2012 averaged 6.2 million barrels per day (bbl/d), the highest level since 1998 (Figure 6). Marked increases in lower 48 onshore oil production, since the fourth quarter of 2011, are mainly because of higher output from tight oil plays from North Dakota and Texas (Figure 7).

The July 2012 Short-Term Energy Outlook forecasts U.S. total oil production increasing to 6.3 million bbl/d in 2012, the highest annual level of production since 1997. In 2013, total oil output rises a further 410,000 bbl/d, most of which is accounted for by increases in lower-48 onshore production. That increase is driven by increased oil-directed drilling activity, particularly in onshore tight oil formations. The number of onshore oil-directed drilling rigs reported by Baker Hughes has increased from 777 at the beginning of 2011 to 1,416 on July 27, 2012.

U.S. dry natural gas production has increased since 2005 mainly because of production of shale gas resources (Figure 8). That upward growth trend has been a little bumpy as economic factors affecting gas prices and weather events led to temporary declines in production. Declining production from less-profitable "dry" natural gas plays such as the Haynesville Shale

has been offset by growth in production from liquids-rich natural gas production areas such as the Eagle Ford and wet areas of the Marcellus Shale as well as associated gas from the growth in domestic oil production (Figure 9).

EIA expects continued year-over-year growth in dry production in 2012, though not as strong as the previous year. The July Short-Term Energy Outlook for dry production for 2012, partially reflects upward revisions to historical data for the first few months of the year. However, EIA expects a small drop in production in the coming months, reflecting the decline in rigs since October 2011. According to Baker Hughes, the natural gas rig count was 505 as of July 27, 2012, which was the lowest gas rig count since 1999. In 2013 dry production is expected to continue to rise, though less than in 2012.

Besides the lease condensate produced directly on oil and gas leases, natural gas liquids are produced in natural gas processing plants and in crude oil refineries. In 2011, 78 percent of U.S. NGL marketed production came from gas processing plants. This natural gas plant liquids production is growing rapidly, while refinery production has been relatively constant in recent years.

The huge increase in U.S. shale gas production is the primary cause of increased NGL production. Growing domestic oil and gas development has pushed NGL production to an all-time high in recent months. NGL production from natural gas processing plants was 2.2 million bbl/d in 2011. Most of this production (1.9 million bbl/d) was lighter hydrocarbons, like ethane primarily used in petrochemical plants, and propane used for residential heating, crop drying, etc. These lighter hydrocarbons are gases in a normal atmosphere, but liquefy under pressure.

Ethane and propane production account for most of the increase in NGLs during the past 5 years.

Some 295,000 bbl/d of heavier hydrocarbons (pentanes plus) were also produced, which are liquid at normal atmospheric pressure and are often added directly to the crude oil stream. For the past few years NGL production from natural gas processing plants has been growing faster than natural gas production, as the industry increases exploration in liquids-rich plays. From 2009 through 2011, for example, NGL production grew by 14.3 percent. At the same time, dry natural gas production increased by 11.5 percent. Nearly 500,000 bbl/d of NGLs were sent to U.S. refineries and blenders making up nearly 3 percent of the total domestically produced liquids fuels stream in 2011.

NGL production in 2012 is expected to be about 8 percent higher than in 2011, according to the July Short-Term Energy Outlook. At the same time, dry natural gas production is forecast to grow by 4 percent in 2012. NGL production is projected to be about the same in 2013 as in 2012, while dry natural production is up slightly.

Differences between Federal and Non-Federal Lands

Oil (Crude and Lease Condensate): U.S. oil production declined from 5.7 to 5.0 million barrels per day from Fiscal Year (FY) 2003 to FY2006. It remained about flat for the next 2 years, before rising to 5.6 million barrels per day in FY2011 (Figure 10).

Oil production on non-Federal lands (State and private) decreased from FY2003 through FY2007 by 419,000 bbl/d, remained relatively flat from FY2007 to FY2010, and then increased by

385,000 bbl/d in FY2011 largely because of increases in oil output in North Dakota and Texas. That growth was the result of increased horizontal drilling and hydraulic fracturing in the tight oil plays.

Oil production from Federal lands is dominated by offshore production from the Federal Outer Continental Shelf (OCS). Trends in Federal OCS production reflect the timing of several particularly important deepwater development projects over the past decade, as well as production disruptions and damage as a result of weather events to both producing infrastructure and projects under development. Total oil sales of production from Federal and Indian lands, including the Federal OCS, increased from 1.6 million bbl/d in FY 2008 to 2.0 million bbl/d in FY 2010, but decreased to 1.8 million bbl/d in FY 2011. The most recent data reflect the impact and aftermath of the 2010 Macondo blowout in the Gulf of Mexico. (The sales data for production on Federal and Indian lands are collected by the various programs within the Department of the Interior (DOI), not EIA, for purposes of assessing royalty payments. The sales data are a proxy for marketed production volumes.)

Natural Gas: Production on non-Federal lands has increased steadily from FY2005 to FY2011 by 16.4 billion cubic feet per day (bcf/d), largely because of shale gas resources (Figure 11). Total natural gas sales of production from Federal and Indian lands have decreased each year since FY2003 primarily as production has declined in the Federal OCS. Based on EIA's latest figures for natural gas production in FY2011, the Federal sales share was 21 percent, down from a high of 35 percent in FY2003 (our earliest available data).

Offshore natural gas sales have been on a consistent downward trend over the last 9 years, falling more than 50 percent as development moved from the gas prone shelf to the richer oil prone deep waters of the Gulf of Mexico (Figure 12). As production offshore was declining, however, the production from onshore Federal lands was generally growing over this period, exceeding offshore sales by FY2008. The last 2 years have seen declines, but FY2011 sales from onshore Federal production are still higher than in FY2007.

Policies that pertain directly to leasing and production activities on Federal and Indian lands are only one among the many factors that are reflected in the data. The rapid increase in natural gas production from shale resources, found largely outside the Federal lands, over the last 5 years has significantly reduced natural gas prices and the relative attractiveness of conventional natural gas resources, including those of Federal and Indian lands.

Natural Gas Liquids: NGL production on Federal and non-Federal lands, including the offshore Gulf of Mexico, is not collected or tracked by EIA.

III. DATA COLLECTION FOR OIL AND GAS PRODUCTION

EIA estimates for non-Federal oil production are based on monthly oil production data from State Government agencies and purchased third party data. EIA estimates for annual non-Federal natural gas production also use data reported on Form EIA-914 "Monthly Natural Gas Production Report," in addition to State data.

Many of the States collect production data largely for revenue purposes, though some data are collected in order to regulate oil and gas production. Different data are collected by each State,

and definitions vary from State to State on the most basic of questions, such as: What is an oil well? Most States define oil and gas wells by a gas-oil ratio (GOR). Each State chooses its own GOR. These can range from 6,000 to 100,000 cubic feet per barrel. Some States use the initial GOR; some use the current GOR. Some States do not define oil and gas wells. One State—Illinois—collects no data at all.

EIA uses these State data together with third party purchased data to estimate monthly oil production. One of the most significant problems in using the State production data is that the lag from when the data are first reported to the time when they stop changing significantly varies enormously from State to State. A few States, like North Dakota and Alaska, report relatively complete data within 2 months of the close of the production month. Others, like Texas and Oklahoma, take a year or two to report complete data.

EIA relies on State data to estimate the growing tight oil production. States typically do not report tight oil production separately from other crude oil production, so we estimate tight oil production based on our understanding of the geology of each producing area. Generally, we identify the reservoirs and formations for each oil well, though sometimes we attribute all production in a county to a particular formation. This is a significant undertaking with roughly 535,000 producing oil wells and 65,000 fields in the United States.

Despite these limitations, earlier this year EIA made a significant improvement in reporting EIA's State oil production estimates. Starting with the publication of January 2012 data in March 2012, State oil production estimates are now reported with a 2-month lag, instead of a 4-month lag, as they had been for many years. In addition, State estimates are being revised

monthly going back to the beginning of the last published Petroleum Supply Annual. These changes required extensive internal coordination and were made with current staff and resources as part of an ongoing internal process improvement effort.

One exception to the use of State data to estimate monthly oil production is the offshore Gulf of Mexico, where EIA relies on the DOI Bureau of Safety and Environmental Enforcement (BSEE). BSEE routinely reports metered data from the Gulf of Mexico Liquid Verification System (LCVS) about 45 days after the end of the production month. EIA uses LVS data for the most recent few months. After several months, these LVS data are replaced with operator-reported data from the DOI Office of Natural Resources Revenue (ONRR). Over the last few months EIA has been working with BSEE to gain earlier access to the LVS data.

EIA also relies on private companies to some extent to estimate natural gas shale production data. Lippman Consulting, Inc. uses State data to estimate shale gas production and EIA relies on these estimates because they are the best available. EIA also provides annual summary information on production of oil and other fossil fuels on Federal and Indian Lands, including onshore Federal and Indian lands as well as offshore production. These data are collected by various programs within DOI, and not by EIA. Drawing from a variety of DOI sources, EIA has recently issued a report, "Sales of Fossil Fuels Produced from Federal and Indian Lands, FY 2003 through FY 2011," that provides EIA's current best estimates based on sales for fiscal year (FY) 2003 through FY 2011. EIA has worked closely with the ONRR, which has posted on its website and shared information with EIA on sales of fossil fuels produced on Federal and Indian lands based on information reported to it through February 6, 2012. Data on fossil fuel sales

continually flow into the DOI program offices, and those programs also conduct audit activities that may result, over time, in changes in the previously reported data to both sales and royalty payments.

Direct Collection of Natural Gas Data: Unlike oil production, EIA collects data on natural gas production from about 240 operators each month. This EIA-914 survey covers five States and the Federal offshore Gulf of Mexico, lumping all the other States together as "Other States." The five States are: Texas, Louisiana, Oklahoma, New Mexico, and Wyoming. Not all operators are surveyed in these States, just the largest ones. The sample of operators is revised each month to account for operator growth and decline, including sales and mergers, based on a database of operating wells that is continuously updated by HPDI, a private firm.

EIA started collecting data from operators in the five States in 2005, at the request of Secretary of Energy Spencer Abraham, because of the growing importance of timely and accurate monthly natural gas production data. Before 2005 monthly natural gas production was estimated from State data. As a result, natural gas production data were not available until 4 months after the close of the production month. Since January 2007 the EIA survey has provided data just 60 days after the close of a production month.

Though more accurate than the oil production estimates, the current natural gas monthly production survey has limitations. It does not collect data on production on Federal lands or data on natural gas shale production, and it has not been expanded to identify and track major changes in natural gas production in the Other States group, such as the rise in shale gas production in Pennsylvania and Arkansas.

In its FY2013 budget, EIA has proposed spending an additional $550,000 per year to increase the timeliness and accuracy of both oil and natural gas production data. Additional funds would allow EIA to expand the EIA-914 to 15 producing States and to add collection of oil production. Collecting data from 15 States would increase the sample size of the collection from the current 240 operators to about 500 operators. Collection of shale and/or Federal lands production data may come at no additional cost. The proposal would increase data quality as well as enable EIA to identify and report on trends sooner.

IV. OIL AND NATURAL GAS RESOURCES

Finally, I want to speak to the issue of resources. The Annual Energy Outlook 2012 projections were based on a natural gas resource estimate of 2,203 trillion cubic feet of technically recoverable resources (Figure 13). Technically recoverable resources, also known as TRR, is a common measure of the long-term viability of U.S. domestic oil and natural gas as an energy source. TRR estimates are a "work in progress," changing as more production experience becomes available and as new production technologies are applied to these resources.

EIA's energy supply projections address the timing of economic production of oil and natural gas resources, which depend upon the production profile of individual wells over time, the cost of drilling and operating those wells, and the revenues generated by those wells, based on projected oil and gas prices. For this reason EIA is primarily concerned with determining well drilling and operating costs, production decline curves, and other economic parameters, such as tax, depreciation, and royalty rates. Although TRR estimates provide a context for the size of

the potentially available resource, this aggregate number says nothing about whether a large or small portion of the resource will be economic to produce in the foreseeable future.

The economic viability of any resource depends not only on its production costs and revenues, but also the cost of developing alternative resources. Estimates of economically recoverable resources, however, receive little public attention in comparison to technically recoverable resources because they change as the expectations change regarding future prices, costs, and technology.

The EIA relies heavily on the expertise of the United States Geologic Survey (USGS) to develop many of the resource production characteristics and parameters that generate TRR estimates. The USGS estimates of TRR represent a snap shot of resource recoverability based on the wells drilled and technologies deployed prior to the assessment. The USGS re-estimates a formation's TRR, typically updating its estimates every 5 to 10 years, whereas EIA re-estimates production decline curves, and in turn, estimated ultimate recovery (EUR) per well and TRR for every Annual Energy Outlook. In EIA's annual re-estimation process, EIA emphasizes current well productivity data, which inherently incorporates the latest technology. EIA also develops estimates for those formations that have recently gone into production, but for which the USGS has not yet developed a resource estimate.

Whenever possible, the EIA uses the formation parameters developed by the USGS and published in their oil and gas resource assessments. For example, the EIA uses the USGS's land area estimates and the number of wells drilled per square mile. When USGS parameters for a

formation are not available, the EIA will use other public data, such as that provided by the State geologic surveys, and by professional geologists and petroleum engineers.

Although each TRR parameter has some degree of uncertainty associated with it, the greatest uncertainty is associated with the determination of a formation's average production decline curve, which specifies a well's estimated ultimate recovery (EUR). In order to determine a well's production decline curve and EUR, its monthly production profile is statistically fitted to a hyperbolic decline curve so that the well's production profile can be extrapolated into the future for its expected 30-year lifetime.

Variability in well production causes considerable uncertainty around a formation's average EUR. Neighboring well production rates can vary by as much as a factor of 3, while well production rates across the entire formation can vary by a factor of 10. This variability is due to the significant local variations in formation depth, thickness, porosity, carbon content, pore pressure, clay content, thermal maturity, natural fractures and water content. The productive variability across a formation's wells complicates the development of EUR estimates because it is not clear which wells within a formation are truly representative of that formation. The EIA captures the productive variability of a formation's EUR by subdividing a formation into subplays—first across States, if applicable, and then into three productivity categories: best, average, and below average.

The uncertainties in determining well EURs are further complicated by three factors. First, most shale gas and tight oil wells are only a few years old, and their long-term productivity is untested. Consequently, reliable data on long-term production profiles and long-term well

recovery rates are lacking. Second, many shale formations - for example, the Marcellus shale - are so large that only a portion of the formation has been extensively production tested. Third, changes in technology and management practices will occur that cannot be anticipated. These changes can make future wells more productive and less costly.

The issue of technological progress is particularly challenging because the continual improvement in drilling and completion techniques has significantly improved initial well production rates and possibly their long-term EURs. Because of the continual improvement in technology, it is not clear whether the production profiles of the older wells within a formation are representative of future well productivity. In certain instances it is appropriate to exclude some of the older well production data in creating an EUR estimate because the technology embodied in those wells is no longer representative of the wells that are likely to be drilled and completed in the future.

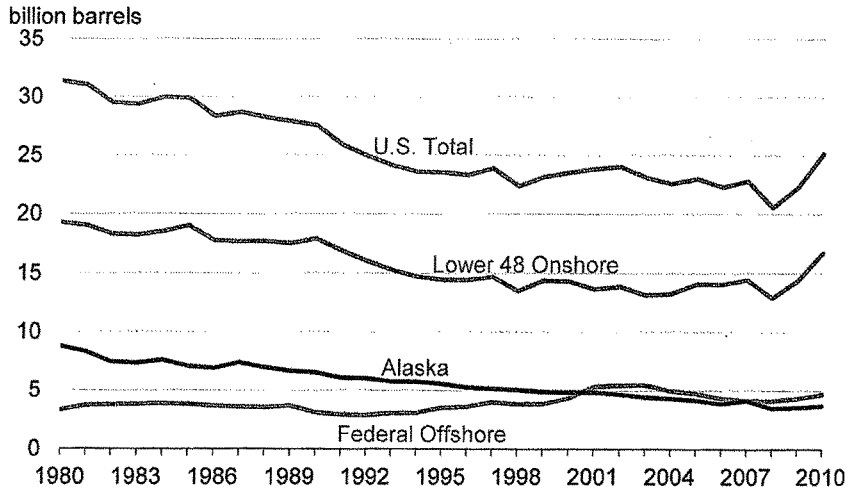
Over time, estimates regarding a formation's average EUR should become less uncertain as more wells are drilled across the entire formation and as more wells produce over a longer period of time. As a formation's EUR estimate changes, so too will the formation's TRR estimate.

EIA will continue to solicit input from geologists, petroleum engineers, statisticians, and other experts to improve the methodology for developing estimates of TRR and to determine specific key assumptions. The ultimate goal is to establish a TRR methodology that is practical, reasonable, defendable, and uses the best available production data. Even so, EIA recognizes that even the best methodology and data will still result in highly uncertain TRRs that will

change over time as more information becomes available and as management practices and technology evolve.

This concludes my statement, Mr. Chairman, and I will be happy to answer any questions you and the other Members may have.

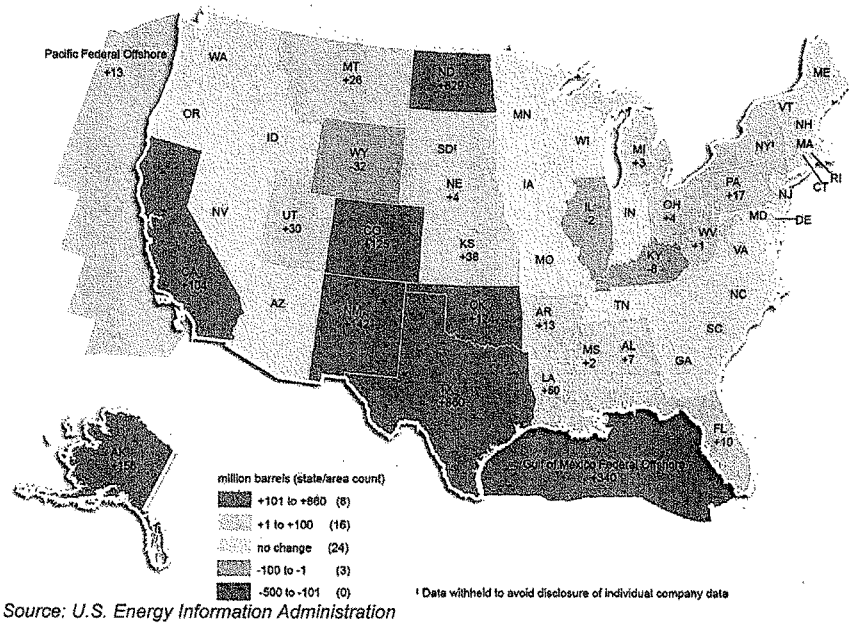
Figure 1. U.S. crude oil plus condensate proved reserves, 1980-2010



Source: U.S. Energy Information Administration

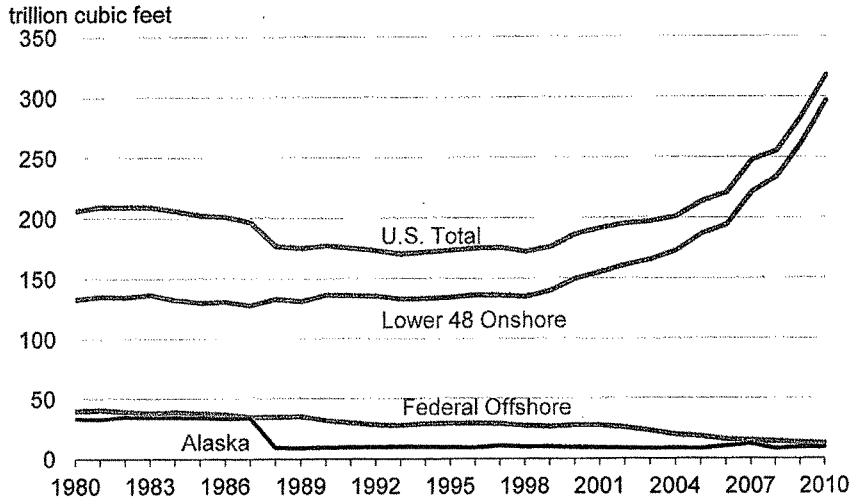
Figure 2. Changes in oil proved reserves by state/area 2009-10

billion barrels of crude oil and lease condensate



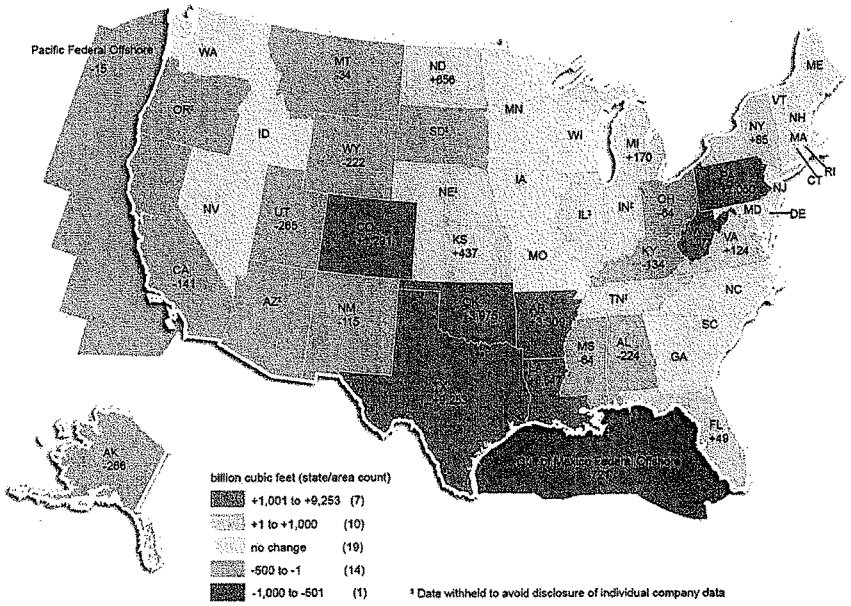
Source: U.S. Energy Information Administration

Figure 3. U.S. wet natural gas proved reserves, 1980-2010



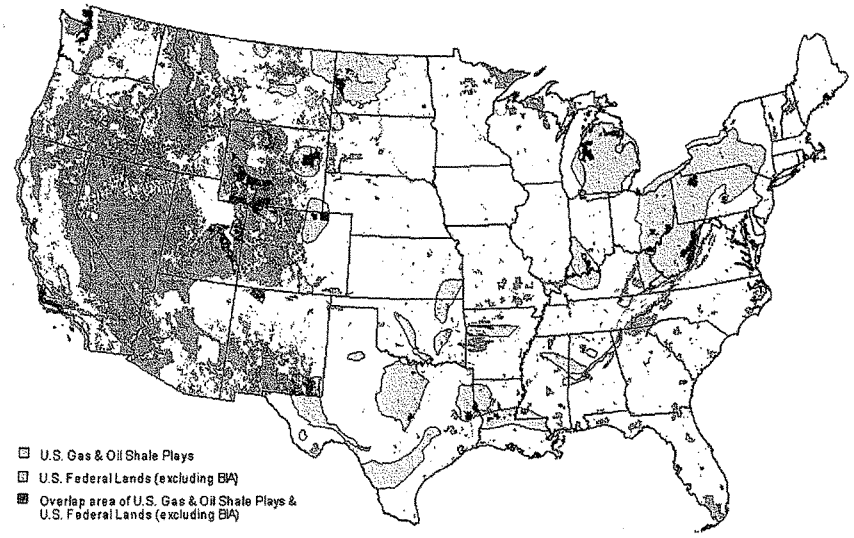
Source: U.S. Energy Information Administration

Figure 4. Changes in wet natural gas proved reserves by state/area 2009-10
billion cubic feet



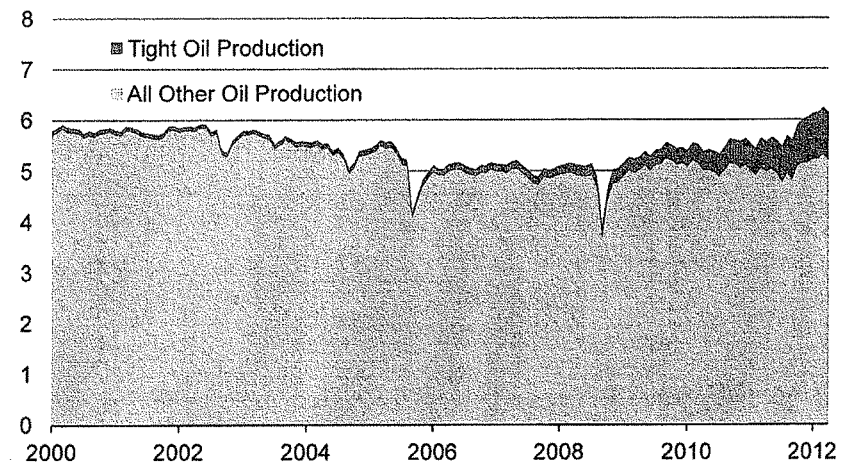
Source: U.S. Energy Information Administration

Figure 5. Lower 48 oil and gas shale formations and federal lands



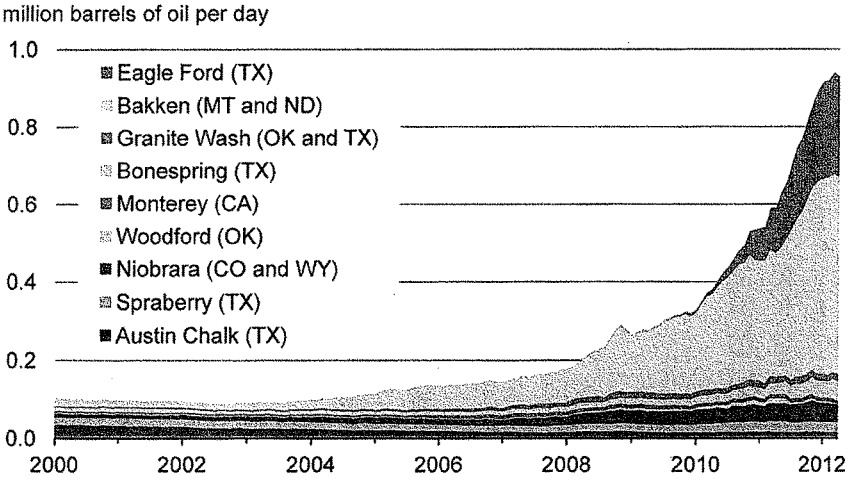
Source: U.S. Energy Information Administration

Figure 6. Crude oil production beginning to grow due to tight oil development, led by Bakken



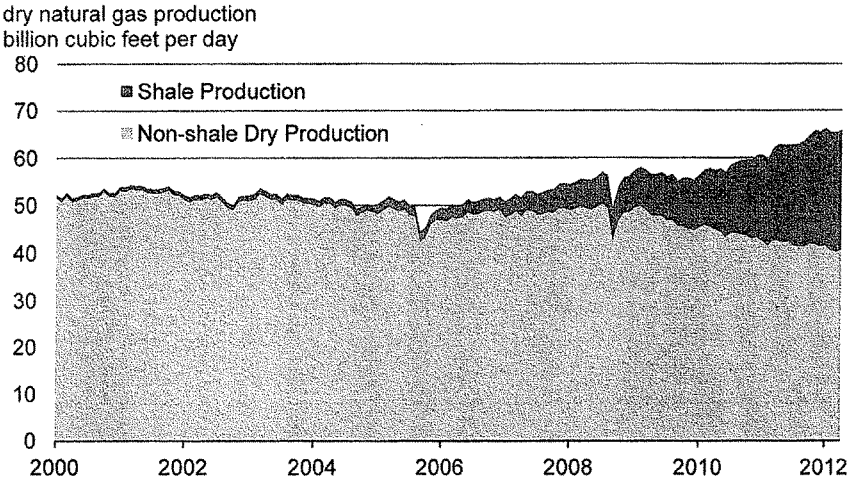
Source: U.S. Energy Information Administration, HPDI, Railroad Commission of Texas, and North Dakota Department of Mineral Resources

Figure 7. Tight oil production for selected plays through April 2012 approaches 950,000 barrels per day



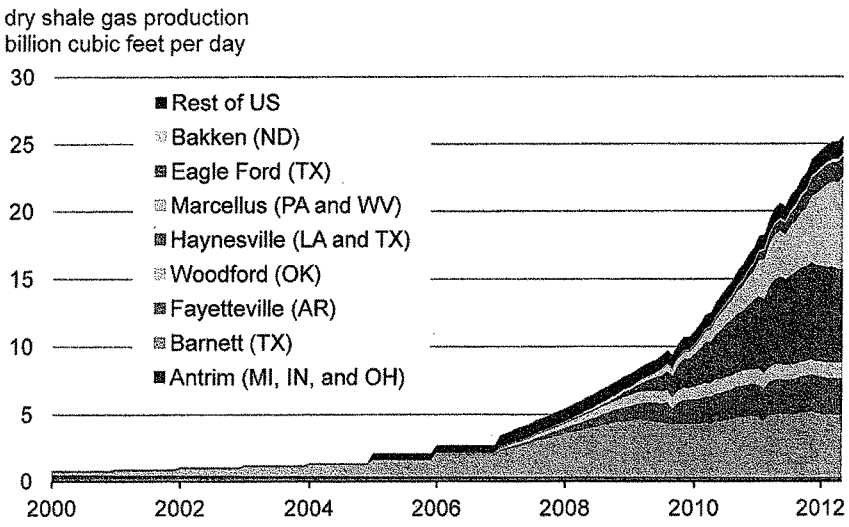
Source: U.S. Energy Information Administration, HPDI, Railroad Commission of Texas, and North Dakota Department of Mineral Resources, through April 2012

Figure 8. U.S. shale gas production comprised over 30 percent of total U.S. dry production in 2011



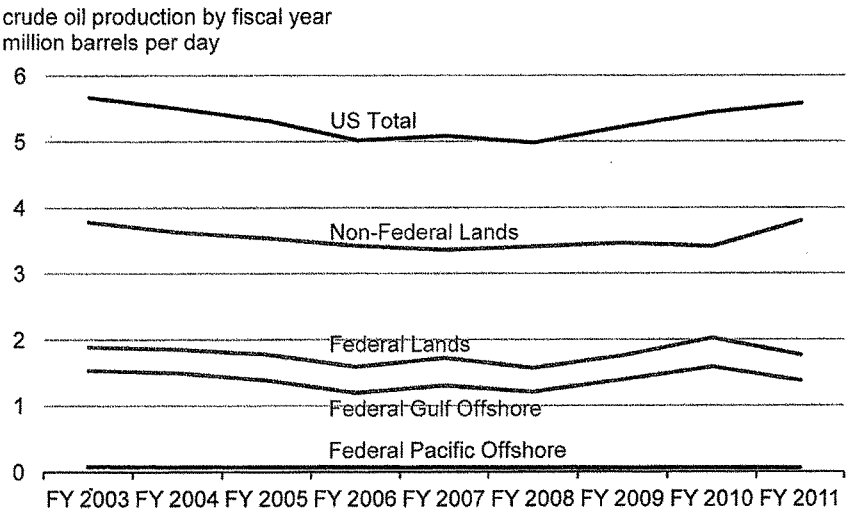
Source: U.S. Energy Information Administration and Lippman Consulting, Inc.

Figure 9. Shale gas production comprised over 30 percent of total U.S. dry production in 2011



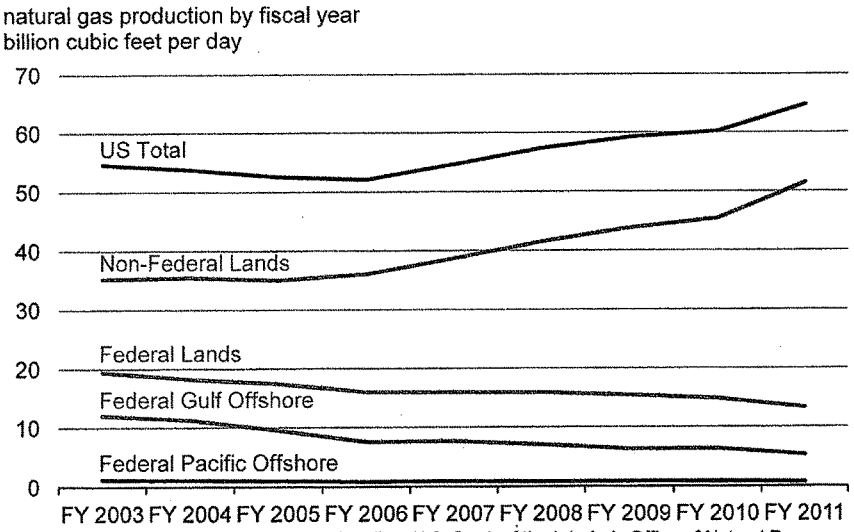
Sources: Lippman Consulting, Inc., adjusted by the U.S. Energy Information Administration

Figure 10. U.S. crude production on federal and non-federal land



Sources: U.S. Energy Information Administration, U.S. Dept. of the Interior's Office of Natural Resource Revenue and Bureau of Safety and Environmental Enforcement

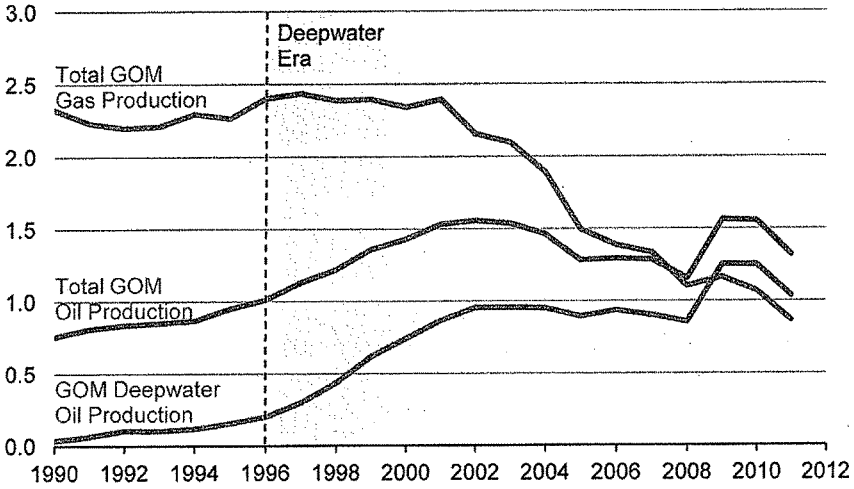
Figure 11. U.S. natural gas production on federal and non-federal lands



Sources: U.S. Energy Information Administration, U.S. Dept. of the Interior's Office of Natural Resource Revenue and Bureau of Safety and Environmental Enforcement

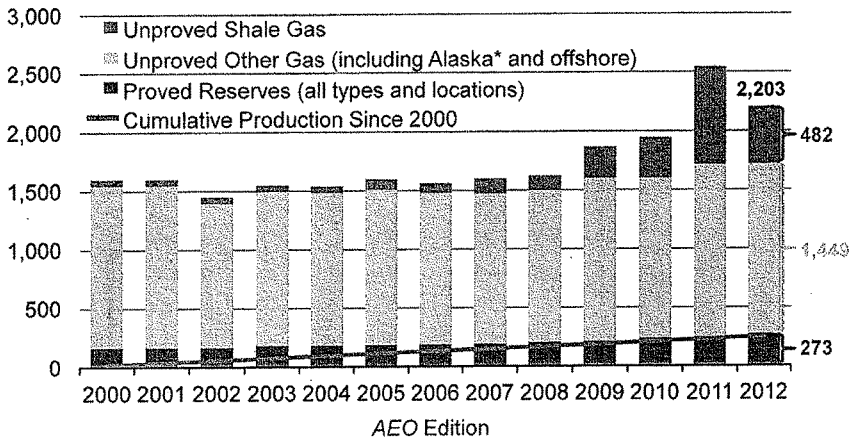
Figure 12. Federal Gulf of Mexico oil and gas production

million barrels of oil equivalent per day



Source: U.S. Energy Information Administration based on HPDI

Figure 13. Technically recoverable resources



**Alaska resource estimates prior to AEO2009 reflect resources from the North Slope that were not included in previously published documentation.*

Source: U.S. Energy Information Administration, Annual Energy Outlook 2012

Mr. WHITFIELD. And now we will recognize ourselves for 5 minutes of questions, and I will begin with myself.

So, Mr. Nedd, back in March, former BLM director Bob Abbey was testifying in a Senate Appropriations Committee, and he said that since energy companies face fewer costs and regulations when they operate on non-Federal lands, that many drilling rigs are moving away from Federal lands to non-Federal lands, and on the Outer Continental Shelf, many rigs are just leaving U.S. territorial waters and going elsewhere. Do you agree with that statement or not? With his statement?

Mr. NEDD. Mr. Chairman, I can say that companies, where they develop, where they decide to seek development is economics and is based on their interests.

Mr. WHITFIELD. Would you mind moving your microphone closer.

Mr. NEDD. I am sorry, Mr. Chairman, the mic wasn't on. I would say that companies certainly make decisions based on economics and other type of factors as to where they will develop, and so whether companies are developing on Federal land or State land depends on their economic factors, on what they are trying to achieve, and the Bureau of Land Management tries to support based on the interest they express in our lands.

Mr. WHITFIELD. I agree with you that they look at economic circumstances, a lot of different factors, but are you aware that there is a trend moving away from Federal lands to non-Federal lands or not?

Mr. NEDD. Well, Mr. Chairman, as we have heard here this morning, certainly industries are looking to see, they are moving to where development of oil or where gas, and most of the large plays are on private and State lands, and so therefore, industry are going where it is best for them to develop that energy.

Mr. WHITFIELD. Secretary Salazar recently made the comment that he believed that hydraulic fracturing really needed to be regulated by the Federal Government because a lot of States do not regulate hydraulic fracturing. Could you tell us what States do not regulate hydraulic fracturing that you are aware of?

Mr. NEDD. Mr. Chairman, I don't have that information directly at hand, and we will be glad to provide it.

Mr. WHITFIELD. OK. So you are not aware of which States do not regulate?

OK. Between 2008 and 2011, the number of drilling permits approved by Interior for drilling on Federal lands decreased significantly, about 37 percent decrease. Do you have any idea why it decreased by that amount? To be specific, in 2008, they approved over 6,000 drilling permits, and in 2011, approved a little over 4,000, and I was just curious, to what do you attribute that, the reason for that?

Mr. NEDD. Yes, Mr. Chairman, certainly in 2008 industries, again, submit applications for drilling permits as they see fit, and what industries submit we will process, and so, again, there are many factors that go into why industries may or may not submit application permit to drill.

Mr. WHITFIELD. Do you know how many applications were submitted in 2011?

Mr. NEDD. Mr. Chairman, we indicate somewhere. I don't have that number right here. I will get it for you. I had it in the back of my mind.

Mr. WHITFIELD. Do you know how many were submitted in 2010?

Mr. NEDD. Yes. Applications received or that was submitted by industry was in 2011 was over 4700 and in 2010 was over 4200.

Mr. WHITFIELD. In 2010, of that 4200, how many did you all approve?

Mr. NEDD. Mr. Chairman, we processed 5200 applications in 2010.

Mr. WHITFIELD. And how many were approved?

Mr. NEDD. Over 4500 was approved.

Mr. WHITFIELD. And from the time that an application is submitted to approval, normally how much time would that take?

Mr. NEDD. Mr. Chairman, that depends on a variety of factors. Certainly from the time an application is submitted, our records show it takes an average of about 300 days, but some 200-plus days are spent waiting on industry to submit information. Once the BLM has a completed application, we estimate it takes—it varies, but it takes sometime up to about 70 days to process, to approve an application.

Mr. WHITFIELD. So from the time you get the data you need from the company, it takes 70 days on the average to approve a permit?

Mr. NEDD. On an average.

Mr. WHITFIELD. I see my time has expired, Mr. Rush, so I will recognize Mr. Rush for 5 minutes.

Mr. RUSH. I want to thank you, Mr. Chairman. Mr. Sieminski, my friends on the other side of the aisle continue to claim that the oil industry is a victim of the administration's policies on oil and gas development on public lands. However, you testified that domestic oil production is actually the highest it has been since 1998, and that the annual production of natural gas will continue to rise.

Do you expect this trend to continue? And do you have anything to say about your forecast for energy, future energy production in the U.S.?

Mr. SIEMINSKI. Thank you, Mr. Rush. The EIA projects that U.S. oil production will continue to increase all the way out to the year 2035. The situation for natural gas is complicated by the fact that prices have fallen because of the tremendous productivity of the gas wells that have been drilled recently. That has caused a rig count, the number of drilling rigs for natural gas to fall to a very low level. That could begin to impact production several years out if we don't begin to see natural gas prices climb back up to levels that support continued development activity.

I think it is fair to say that there are opportunities for further production of both oil and natural gas on Federal, State, and private lands and that some of the policy issues associated with how quickly those resources are developed drive the discussion of how high oil and gas production could go and over what time period. As you know, EIA is not a policy organization, and our forecasts are based on existing laws and technology and economics.

Mr. RUSH. Right. Well, am I right, or would you agree that there is a boom in the oil industry right now, that we are in boom times?

Mr. SIEMINSKI. There certainly is a tremendous rate of activity taking place, particularly in the shale resource-prone areas in the United States. Growth in those areas is being driven by the application of technology, 3D seismic activity, horizontal drilling, fracturing, hydraulic fracturing, multi-stage fracturing, completions, multiple completions being done off of single drilling pad locations. In the offshore area, subsea completions have enabled development in deeper and deeper waters. So, yes, Mr. Rush, I agree with you that there is a boom going on in U.S. oil production.

Mr. RUSH. Well, thank you. It seems to me that especially as it relates to energy, good times are here again.

I want to ask the other witnesses about the role of industry in oil and gas production. Of course, the government doesn't drill for oil or gas, the government just makes the land available to industry so that they can drill for oil and gas. We might benefit from a better understanding of how they decide where they would like to operate. Mr. Nedd, can you discuss the role industry plays, the factors that they consider when deciding whether to produce oil and gas on land managed by the BLM?

Mr. NEDD. Yes, Mr. Ranking Member. Certainly industry began with expressing an interest, and from that expression of interest, the BLM will complete the required environmental order type of analysis. Once industry is given a lease, industry, it is then up to industry to submit an application for a permit to drill, and then looking at those actions, the BLM considers, again being a multiple use agency, what are the other values that may be impacted from that development and how best to mitigate it. The BLM looks at things such as conservation, recreation, all that type of factors, and in trying to strike an environmentally balanced approach to that development.

Mr. RUSH. Can the Federal Government order, force someone to drill or produce oil and gas to meet the requirements of the lease?

Mr. NEDD. Absolutely not.

Mr. RUSH. So if no drilling occurs on leased lands and the lease expires, do we have any responsibility to the leaseholder?

Mr. NEDD. Not if they expire, Mr. Ranking Member.

Mr. RUSH. Thank you, Mr. Chairman.

Mr. WHITFIELD. The gentleman's time has expired. At this time, I recognize the gentleman from Michigan, Mr. Upton, for 5 minutes.

Mr. UPTON. Well, thank you. Thank you, Mr. Chairman, and Mr. Sieminski, welcome in your new position as—I know you have been here before, and we are delighted that you are here, and we look forward to a very good relationship.

Mr. SIEMINSKI. Thank you, Mr. Upton.

Mr. UPTON. I have to say, for a long time, I have been an advocate for a North American energy independent plan. I think we can actually do it if you put all the pieces together, and I would like to get your comments on that, and I want to—before I do, I want to just roll through some numbers and see if you think that we are right on this.

According to your estimates, we use about and have been using about 18 million barrels a day of liquid fuels for transportation, which is about the same volume in the future because of our auto

efficiency standards, we have made great strides there. On the supply side our, my numbers show that we produce about half of that now. Oil production, as you said, is about 6.2 million barrels a day, natural gas liquids nearly 2 ½ million, biofuels account for about a million, so that is about 9 ½ million. Our imports from Canada and Mexico, about 3 million barrels a day, I think. I know from Canada oil sands we get about a million barrels a day, so that leaves us about 6 million barrels a day that we have to get from someplace else, mostly overseas.

So some of the outside estimates show that we could bring in from oil sands like Keystone—Keystone, I think, was about, what, 700,000 barrels a day in terms of that line? And I know as I have visited some refineries in the Midwest, the BP—or, excuse me, the Marathon refinery outside of Detroit just expanded by $2.2 billion to account for oil sands. I know the BP refinery over in Whiting, Indiana, they have spent more than $3 billion expanding their capacity trying to get ready for oil sands, not necessarily from Keystone. But the Canadian folks tell us that they are likely to get up to as much as 4 million barrels a day from Canada before the end of the decade if things proceed well.

Your testimony cites the tremendous reserve increases with State and private land shale production, and I think there are some outside estimates that show that we could see an increase in production of about 4 million barrels per day before the end of the decade. I don't know that that is quite your estimates, but some outside interests show that. Alaska, I don't know that it is in their testimony today, but the TAPS pipeline capacity we know has declined, this was a pipeline that was built for as much as 2 million barrels per day.

Today they are quite a bit less than that. I want to say 600,000 barrels per day, and it has been declining by about 8 percent a year, but if, in fact, we were able to increase production in Alaska, perhaps we could get back up to where we thought, and then, of course, as you indicated in your testimony, production in the Gulf has declined, I want to say by about 100 million barrels last year. But if, in fact, we could increase production, some outside estimates again 2 ½ million barrels per day before the end of the decade, we are there, right? I mean, we are there in terms of what our needs are and what we can get from Canada, Mexico. Mexico has been declining, I know, but with the Gulf and Alaska, we really could get a North American energy independent plan. Is that right?

Mr. SIEMINSKI. The term that I think I would prefer to use is "self-sufficiency."

Mr. UPTON. Works for me.

Mr. SIEMINSKI. Let me try to put some numbers on this for you, Mr. Upton. I will speak first about just the U.S. Alone.

So, total oil liquids production in the U.S. is running at about 10 million barrels a day. I mentioned in my testimony the phrase "technically recoverable reserves," or TRR. Under our reference case assumptions in the EIA's Annual Energy Outlook, we believe that production will climb to about 12.5 million barrels a day by 2035. In the high-TRR case, so that is an optimistic view of the resource base, tight shale oil production could climb from a little over a half a million barrels a day now, maybe, you know, somewhere

between a half a million to a million barrels a day, to well over 2.5 million barrels a day by 2035. So what that suggests is that there is a possibility that you could get U.S. oil production up to about 15 million barrels a day by 2035.

In the reference case, as you indicated, with oil demand in the U.S. running 18 million to 19 million barrels a day, with population growth and economic growth, EIA actually expects total oil demand will decline to about 20 million barrels a day by 2035. However, under a more aggressive efficiency scenario—higher fuel efficiencies for cars, faster penetration of electric vehicles—that number could actually come down to about 18 million barrels a day.

So in the EIA reference case, we have net imports in 2035 falling from about 46 percent last year to 36 percent in 2035. It could get down to as low as 14 or 15 percent. We would still be importing oil in the U.S., but a lot of that would be coming from Canada. And that would lead back to your point.

Mr. UPTON. So, as a bottom line, with North America we could do it when you include Canada and Mexico.

I know my time has expired, and I appreciate the chairman being generous. Thank you. I yield back.

Mr. WHITFIELD. Thank you.

At this time, I will recognize the gentleman from Illinois, Mr. Shimkus, for 5 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman.

And it is great to have you here. You know, being on the Energy and Commerce Committee, we don't normally get BLM folks and Forest Service folks, so it is, for me, a pleasure to have you here.

Mr. Sieminski, good to see you again. Appreciate it. And I am getting a greater appreciation for independent agencies within bureaucracies. We appreciate your work, the difficult balance you have to have. But, really, you are just calling the cards as they are laid out in front of you, and we don't always do that up here, so I think we—I, personally, appreciate this.

You know, my first analysis as I was listening to the opening statements and some of the questions is, you know, there really is no reason we should have a recession currently if we release our energy companies to explore, identify, and recover our energy resources. There is really no reason we should be held captive to imported crude oil if we released our energy companies to explore, identify, and recover. There is no reason for us to continue to have a negative balance of trade and continue to be a borrowing country when we could have a positive balance of trade and we could turn into a lending company if we released our energy companies to explore, identify, and recover.

And I think the analysis here—I think this is a great hearing. Even in my own district in southern Illinois, where is my oil and gas exploration and recovery going on? It is going on on State land and on private property. Our biggest oil well is under a State wildlife refuge, underneath the lake. It has been producing now for about 10 years. The fracking boom is coming to southern Illinois, and there are a lot of exciting opportunities there, especially for rural, small-town America.

So this is a good comparison and contrast, and I am glad the chairman has brought it up. I also visited Tulsa, Oklahoma, and right outside their State capitol they have an oil derrick, I think it is Old Rosie or something they call it, because they produce oil right on State lands right next to the capitol. So, again, a good reason to have this hearing.

Also, Ms. Wagner, I also have a national forest, the Shawnee National Forest. Allen Nicholas is the supervisor. One of the benefits—this gives me a chance to publicly proclaim what a great job he does. What has been beneficial is having a supervisor stay on site for many years. When I first got on site, they were swapping them out almost on a yearly basis. Relationships weren't made with all the exciting parties that get involved with forest issues.

But I do like the fact that a national forest is for all citizens, for the recreators, for the conservationists. In your testimony, you talk about the productive possibilities. We are now going through a possible timber harvest, and its nonnative species. So it should be a win-win. Of course, it is not, with the fights that happen when you have to represent a national forest.

But we hope that is something that can continue to move forward, which I do think is a win-win. We have horseback riders back in the forest with well-maintained trails. But it takes work, just like anything else. So I want to put that publicly on record and look forward to working with the Forest Service, hopefully, if the voters allow me to, for years to come.

Quickly, I think, Mr. Nedd, I want to talk about the 5-year OCS leasing plan that is currently being proposed by Secretary Salazar. It has the fewest proposed number of lease sales ever submitted by an administration, going back to President Carter.

Is the administration concerned about the possible economic impact of the fewer leases being available and the possible job impact that that could have? Do you know?

Mr. NEDD. Congressman, I am sorry. I can take back that question and have an answer for you.

Mr. SHIMKUS. Yes, because we always hear—I mean, we got involved with the rules and regulations, the environmental concerns, but we want to focus on jobs and the job impact, so that is why that question kind of comes out.

And let me just follow up on this. There is always this debate on leases versus drilling. And I heard my colleague from Illinois mention that also. But just because a private sector has a lease and they are prepared to drill, they need permission to drill; is that correct?

Mr. NEDD. Yes. Yes, Congressman.

Mr. SHIMKUS. And who provides that permission?

Mr. NEDD. If it is a BLM-managed orIndian trust land, permission to drill, if it is surface-managed by the BLM, will be BLM. If it is on a Federal surface agency, then it is a joint effort, where we work with those agencies to ensure the drilling plan is consistent with the surface use plan and——

Mr. SHIMKUS. So just because there are numerous leases, no one should assume that that right to drill is automatically given to someone who has a lease.

Mr. NEDD. Well, Congressman, I would like to frame—with a lease, the operator or the leaseholder can submit an application for drilling anytime. And until that application is submitted to drill, the agency has no action to take on that lease.

Mr. SHIMKUS. Well, and I am not trying to get—but we are wordsmiths up here, and sometimes we try to leave out some of the truth in between our provided statements.

The point is, a lease is an attempt for industry to figure out if there is something to recover. They do the search. Then they have to, if they find something—they may not find something, and so then they don't need to operate and continue forward on the lease. But then if they do, then they have to go through the process of an application to drill. It is a long process.

Mr. NEDD. It is a long process. And a lease is issued, a Federal lease is issued for 10 years, and so there are a number of factors. And industry tends to look at where developments are going on and submit for a lease. And so, there are a number of factors, but, yes, once a lease is issued, it takes an action from the lessee.

Mr. SHIMKUS. Thank you very much.

Mr. WHITFIELD. The gentleman's time has expired.

At this time, I will recognize the gentleman from Virginia, Mr. Griffith, for 5 minutes.

Mr. GRIFFITH. Thank you, Mr. Chairman. Appreciate it.

Mr. Sieminski, I was listening to your answers to Congressman Rush, and I got the impression that you feel that it is likely that natural gas prices will go up because they are historically at all-time lows and the production will slack off if they don't go up. So, one way or another, you are going to have prices go up. They either go up because of natural economic forces or they go up because the supply starts to diminish because there is no exploration because the price is so low. Is that a fair statement?

Mr. SIEMINSKI. Yes, sir.

Mr. GRIFFITH. OK. And I appreciate that.

And I am curious about the U.S. Geological Survey issues that you raised. It appears that you all rely on their data to develop resource estimates for oil and gas. And you mentioned that they have not yet developed resource estimates for formations that have recently gone into production.

What formations has the United States Geological Service not yet developed estimates for?

Mr. SIEMINSKI. I think one of the most important ones is Utica. It covers Ohio and parts of Pennsylvania.

Mr. GRIFFITH. OK.

Mr. SIEMINSKI. They just finished their assessment of the Marcellus through Virginia, West Virginia, Pennsylvania. And even that assessment was based on a large sample of vertical wells and not as many of the horizontal wells which are typically being drilled by the industry.

Mr. GRIFFITH. Do you think that may have created an underestimate of the amount of gas that might be available there?

Mr. SIEMINSKI. I think it is possible that what we will find is that, as the production data begins to come in—and Pennsylvania is one of the States that has significant lags in its reporting of production data—that we will begin to see those numbers inching up.

EIA would reflect that in its estimates of proved reserves and production potential. Typically, the Geologic Survey runs on a 5- to 10-year schedule before they would get back to looking at a formation after they have done an assessment.

Mr. GRIFFITH. OK.

And are there any other areas that you all believe that the USGS needs to provide updated information on to better gauge oil and gas?

Mr. SIEMINSKI. There isn't any other area that comes to mind right now. I would be happy to come back to you if we could nail down additional places.

Mr. GRIFFITH. And I don't guess you can shift more of that Marcellus into Virginia.

Mr. SIEMINSKI. It would be—well, you know, this is actually a good time to say that the development that takes place, whether it is on Federal lands, private lands, State lands, there is a balancing that has to take place. And the balancing is the economic considerations against environmental considerations, national security, and lots of other factors that have to be considered, as have been brought up by my colleagues from BLM and the Forest Service.

Mr. GRIFFITH. Thank you very much.

Mr. Chairman, with that, I will yield back.

Mr. WHITFIELD. The gentleman yields back.

At this time, I will recognize the gentleman from Colorado, Mr. Gardner, for 5 minutes.

Mr. GARDNER. Thank you, Mr. Chairman.

And thank you to the panel for joining us today for this discussion.

And I just wanted to read some statistics that I have before me from the Western Energy Alliance, who we will hear from in a few minutes. And their statistics show that, between 2008 and 2011, the Bureau of Land Management offered 81 percent less acreage, which has resulted in a 44 percent drop in leasing revenue, and that, nationwide, royalty and leasing revenue has declined by 12 percent.

In my district, the Niobrara Formation, Denver-Julesburg Basin, we have seen one county in particular in northern Colorado, one county, Weld County, has 31 oil and gas operators in that county. Two of the oil and gas operators recently made their property tax payments, I believe for 2011. One of the operators paid $52 million in property taxes. Another operator paid $57 million in property taxes. This is a county with a budget of about $200 million, and they paid $109 million. Just 2 out of the 31 paid $109 million in property taxes—money that goes to the schools, money that goes to the community college, money that goes to the county.

And so I am very concerned when we talk about 81 percent less acreage available, a 44 percent drop in leasing, and 12 percent drop in revenue. In Colorado alone, BLM has issued 97 percent fewer leases, just offering four parcels in 2011—a 98 percent decrease in the leases that have been made available in Colorado. Seventy-one percent of the leases offered have been protested.

And so I want to clarify, if I could, Mr. Sieminski, a little bit about something in your opening statement and a little clarifica-

tion. You had said that since development is taking place on non-Federal land—let me rephrase that. You make a statement in your statement that the fact that development is taking place on non-Federal land, it is simply because geology favors non-Federal land. But doesn't that statement ignore research by other Federal agencies like GAO, the Government Accountability Office, that has testified that the Green River Formation, which lies beneath Colorado, Wyoming, Utah, contains over a trillion barrels of recoverable oil?

Mr. SIEMINSKI. I think that it is going to vary from State to State. And as more experience is gained with shale formations, I think we might discover that there are, indeed, places on Federal lands that are suitable for development.

Just as another example, in the Annual Energy Outlook that EIA published last month, we did point out that the trans-Alaska oil pipeline throughputs are beginning to diminish and that that could result in flow problems up there. And, obviously, there are Federal lands in Alaska that could be developed that would potentially add to oil production.

Mr. GARDNER. But it is not entirely true that geology is vastly different on Federal land and private land. I mean, that is not entirely true. We have seen reports here.

Mr. SIEMINSKI. Well, it would just depend on where the that geology happened to fall.

Mr. GARDNER. Right. It is going to vary across the—I would agree with you there. It varies.

To Mr. Nedd and Ms. Wagner: Governor Hickenlooper of Colorado stated, and I quote, "There have been tens of thousands of wells in Colorado that have used hydraulic fracturing to increase their productivity, and we can't find anywhere in Colorado a single example of the actual process of fracturing that has polluted groundwater."

Mr. Nedd, would you agree with that statement that Governor Hickenlooper has made?

Mr. NEDD. Congressman, what I can say is, within the Federal lands that BLM manages, we have nodocumented case of that. I can speak from the Federal lands.

Mr. GARDNER. Thank you.

Ms. Wagner, would you agree with that statement?

Ms. WAGNER. That is true for activity on national forests.

Mr. GARDNER. And to Mr. Nedd, you are currently undergoing a rulemaking on hydraulic fracturing. How much will these rules add to the cost of drilling?

Mr. NEDD. I am sorry, what is the question?

Mr. GARDNER. BLM is currently undergoing a rulemaking on hydraulic infrastructure. Do you know how much these rules will add to the cost of drilling?

Mr. NEDD. Congressman, based on the assumptions in our economic analysis, I believe we said it would increase an average of somewhere around $10,000 to $13,000. I would have to get that exact figure. But that economic analysis was based on some assumptions that were made.

Mr. GARDNER. And according to some experts, they believe that the cost will actually be around $250,000 to each new well, not to

mention permitting delays and others. Do you dispute those numbers, and why?

Mr. NEDD. Well, again, Congressman, I don't know what is making up those numbers, so I cannot speak to them.

Mr. GARDNER. And I have a number of other questions, Mr. Chairman, but I see my time has expired. If I could be allowed to submit questions for the record, I would truly appreciate it.

Mr. WHITFIELD. Absolutely.

The gentleman's time has expired.

At this time, I will recognize the gentleman from California, Mr. Bilbray, for 5 minutes.

Mr. BILBRAY. Thanks. I appreciate it, Mr. Chairman.

Mr. Nedd, we had an interesting situation in California. With all the talk of the Interior Department trying to cooperate on wind and solar projects, how long has it taken to permit the land for solar or wind in the Mojave Desert? I mean, how long have we been working on this?

Mr. NEDD. Well, Congressman, I don't have the exact numbers here. I know we have been working on that process for a little while. I just don't have the exact—and I will be glad to get back to you.

Mr. BILBRAY. Here is a problem we—my scientists came—in San Diego, our University of California scientists developed an algae strain to develop true gasoline, true diesel. When they, as State employees, when they looked to go to production in the State of California, they found out that they could not get the permits to go into production for 7 years. So they literally packed up and left the State because government regulations made it impossible to implement a green strategy.

What is the possibility of the Federal Government being proactive on our lands, such as the area in Imperial Valley, which scientists have identified as being, they said, quote/unquote, pristine, perfect for the generation of green fuels based on slope and sunshine and everything else—what would it take for us to create a Federal green zone to encourage the production of algae production on Federal property rather than these scientists having to leave town and go thousands of miles to the east?

Mr. NEDD. Congressman, while I can't speak to the specific, again, issue raised, what I can say is that the BLM is certainly proactive in trying promote the development and production of energy—hence, leasing reform. The BLM implemented that leasing reform to bring more certainty to——

Mr. BILBRAY. But you admit that even with a Federal mandate on—and, in fact, I remember, it was Feinstein who worked this out—even with a Federal mandate, it has taken years to be able to permit the siting of green technologies on our Federal land. That is fair to say, isn't it?

Mr. NEDD. Again, Congressman, I don't have the information to speak specifically to that. And I would——

Mr. BILBRAY. OK. Well, I am just telling from you observation, it has taken years and years.

My question is, would the administration have opposition to this Congress setting aside specific locations on Federal property to be pre-permitted under the Clean Water, Clean Air, Endangered Spe-

cies Act for the production of green fuels, so that when the next group of scientists need to look for a site, they know they can come to the Federal Government, they won't have to wait 7 years, and they know where they could go to go into production? Would the administration support the pre-permitting of sites on Federal property for the development of green fuels?

Mr. NEDD. Congressman, that is certainly an interesting proposition, and I would be glad to take it back and respond to your question.

Mr. BILBRAY. OK. Well, let me just say this, Mr. Nedd. My concern is that we have spent billions of dollars talking about green technology, but we have spent such little time talking about how the government can change our regulations so that the implementation of a green strategy is actually legal, let alone more feasible. And it is sad that we haven't talked about the obstructions that the government regulations have made to appropriate green technology. We have always talked about how much money we can give away, rather than talking about how much we can change our operations.

And, Mr. Chairman, I think that we need to focus more on that. And I think that is someplace that Democrats and Republicans ought to agree on, is the fact that, what isn't the Federal Government, in our regulatory oversight, doing appropriately to allow appropriate technology to be moved forward? It is not just about oil and gas. The obstruction of Federal regulation stands in the way of all kinds of stuff.

And I will give you an example. I have a bill that I have introduced with the gentleman from Tennessee to streamline the permitting process for putting solar panels on top of houses. When the industry comes to me—and I would ask my Democratic colleague to understand this—when the industry that puts solar panels on the house says it costs as much to get a government permit, a license, to put the panels on as it does to make the panels per kilowatt, that should be something that both sides can say, if you want to talk about energy independence and if you want to talk about clean energy, then you have a responsibility to straighten out the regulatory morass that is blocking the implementation.

You can talk all you want, you can write as many checks and give all the grants, but if you are not going to make it legal to do the right thing from the green fuel technology, I don't think anyone has a right to stand up and talk about it.

I yield back, Mr. Chairman. Thank you.

Mr. WHITFIELD. Thank you very much.

At this time, I will recognize the gentleman from Nebraska, Mr. Terry, for 5 minutes.

Mr. TERRY. Well, thank you, Mr. Chairman, for another good, interesting hearing on an important issue.

Mr. Nedd, I will ask you, the 5-year OCS leasing plan that Secretary Salazar recently unveiled I believe would reinstate by regulatory policy the moratorium in the gulf that was lifted in 2008 when we experienced that incredibly high spike in prices and people rose up and demanded action. And under a Harry Reid-run Senate and Nancy Pelosi-run House, there was a very bipartisan vote and effort to lift the moratorium. That seems to have been put

back in place now, at least for 2012 to 2017, and remove the possibility of even drilling off Virginia coast, and delays for years any drilling off of the Alaska coast.

So doesn't this leasing plan encourage energy companies to move away from Federal lands, even to other countries like Brazil, which seems to be now part of our DOE policy, and to develop resources in other areas than Federal lands? Has your department reviewed whether that is a disincentive to investment in the United States?

Mr. NEDD. Congressman, I am not aware of whether that has been analyzed or not. And, again, with respect to that, I would love to take that question back and provide you with an answer.

Mr. TERRY. But everyone is in agreement that this new 5-year plan from 2012 to 2017, this new 5-year plan reinstates that moratorium within its rules and regulations as it is drafted. Is that a fair statement? I think it is fairly obvious.

Mr. NEDD. Well, again, Congressman, you know, BLM's role is on onshore. And, certainly, I would be happy to take back this kind of question and ensure you get an answer.

Mr. TERRY. All right. Thank you, Mr. Nedd.

Mr. Sieminski, what do you think? Does this new order from Interior impact investments in the United States?

Mr. SIEMINSKI. The policy issues surrounding Outer Continental Shelf leasing is something that EIA would take into consideration in its forecast, but it is not something that we would comment on.

Mr. TERRY. OK. I appreciate that.

Back to you, Mr. Nedd. I may anticipate the answer to your question, though, but on the second panel there is a group called Trout Unlimited. And as a trout fisherman, we have a family cabin that has been in Rocky Mountains, had it in the family since the late 1800s, and there is a nice little trout stream. So I am sympathetic with trout fishing. But they have consistently opposed any oil and gas operations on Federal lands.

Now, are you aware of how many lawsuits that Trout Unlimited has been involved with, or appeals, against Interior over oil and gas productions in the last 10 years?

Mr. NEDD. Yes, Congressman, I do not have that data, and so I certainly would be glad to try and get that answer to you.

Mr. TERRY. All right. Now, are you aware of—I will ask you if you are aware of—any conversations between the BLM and Trout Unlimited to encourage lawsuits to be brought to block any oil and gas development on Federal lands?

Mr. NEDD. Congressman, I am not aware of any such conversation.

Mr. TERRY. OK. I appreciate that.

I will yield back.

Mr. WHITFIELD. The gentleman yields back.

At this time, I will recognize the gentleman from Louisiana, Mr. Scalise, for 5 minutes.

Mr. SCALISE. Thank you, Mr. Chairman. Appreciate you continuing the series of hearings that we have been having on energy policy, you know, especially the American Energy Initiative, as we try to go through and look at all of the different things that are holding our country back from being energy-independent and ways that we can create more jobs and also generate billions of dollars

more to the Federal Government. And I think it is not a complex answer; the answer is pretty basic if you look at American energy.

And I think the focus that you have been doing, Mr. Chairman, has been important, because it has highlighted so many of the things that are really impediments to American energy production, things that are making us more reliant on Middle Eastern oil and oil from countries that maybe are less favorable to us.

I know on the second panel I am looking forward to hearing Mr. Clements, who is from our area in southeast Louisiana. We have been experiencing a number of different problems. Mr. Terry touched on a few of those.

But if I can ask, Mr. Sieminski, because I know your agency puts out a lot of good data to, you know, try to show maybe where we are, what is out there: When you look at both leases, where we were before Macondo, where we are now, you know, the administration has been touting that there is no moratorium in place now, that permitting is back up. I know Mr. Clements, in his testimony, talks about the pace of permitting still being slow, much slower than before the moratorium, highlighting some of the problems that we have seen. There have been a number of independent studies in the New Orleans region, as well as throughout the Gulf of Mexico, highlighting the problems with getting energy production back on line at its pace that we should be at, and then the 5-year lease plan that closed off about 85 percent of the areas that were getting ready to come open for exploration.

I don't know if you have looked at the testimony of Mr. Clements, but he does give some, kind of, on-the-ground experience of what the problems are and the slowdowns that still are holding back our ability to go and explore safely for the things that we know are out there. You know, have you looked at that? And what is your comment on it?

Mr. SIEMINSKI. EIA has not looked at that.

Just from my general understanding of the industry, I think that there are concerns about the pace of leasing and resumption activity in the Gulf of Mexico. Companies are saying that things are getting better.

Largely, I think that a number of the companies are simply focusing on the onshore possibilities, with all of the activity in the Eagle Ford in Texas, for example, that has moved forward. In Louisiana, there is still a great deal of activity taking place in the Haynesville Shale and other——

Mr. SCALISE. Well, we have seen a lot of that in Haynesville. I have been up there to north Louisiana, the Shreveport area, which has been just a phenomenal area of growth with natural gas. And we have seen that in other States, too. Of course, the irony is that those are areas on private lands. The Haynesville, the Bakken, the areas where you have seen tremendous growth in jobs, as well as in energy production, its been on areas that are private, where the Federal Government does not currently have the ability—now, the Obama administration is, through a number of different agencies, DOI and EPA, even trying to shut some of that down.

But on Federal Government lands, where the Federal Government actually does have a say, that is where we have seen the problem. That is where I think Mr. Clements is alluding to the

slow pace of permitting, you know, where the Federal Government actually does have the ability to control it.

And the President said a lot of times that the United States only has 2 percent of the world's known reserves. Now, that is a false number, because I think anybody that knows—I mean, the Bakken, you wouldn't have known that was out there if you didn't go and explore for it. And before the exploration happened, they would have said there is probably nothing down there. Well, now you go to North Dakota, I think they have 3.5 percent unemployment because you can't even find a place to live right now because so many people are moving there to work because they are finding all this energy that wouldn't have ever shown up on those metrics.

And so I don't know if you all have looked at that, but, you know, when the President says we have only 2 percent of the world's known reserves, does he include, for example, what is very likely out off the coast of Virginia, which right now you can't even go and look at because of Federalprohibitions? Would that statement include, you know, what is a known reserve, would that include what is off the coast of Virginia, for example?

Mr. SIEMINSKI. The probable reserves would be in there because the U.S. Geologic Service would have taken some of that into consideration. I think that——

Mr. SCALISE. Well, when he says the world's "known reserves"——

Mr. SIEMINSKI. Right.

Mr. SCALISE [continuing]. Because they nuance the words. I mean, what you know is out there and what industry knows is out there is one thing. But what the administration is saying is that we only have only 2 percent of the world's known reserves. Again, it is a misleading number, because we know there is a lot more out there.

And I just wanted to see if you, you know—make sure that what I am projecting is accurate in terms of how they describe it versus what really could be out there if you let them go look.

Mr. SIEMINSKI. I think what you were speaking to, Congressman, is the difference between the level of known reserves and the pace at which they are being developed. And I understand that some of your constituents are probably wishing that that development could move along faster. There are balancing issues that I spoke to earlier, and the administration has to look at all of those factors in order to come to a conclusion.

Mr. SCALISE. Thanks.

I see I am out of time, Mr. Chairman. I yield back the balance.

Mr. WHITFIELD. The gentleman's time has expired.

Does the gentleman from Oregon seek recognition?

I believe we have completed this round of questions with this panel. I do have one other question, though, I would like to ask of Mr. Nedd.

I had read some of the testimony of one of the other witnesses that will be on the second panel, and there was some discussion about a Shell Oil application off the coast of Alaska in which they had spent $5 billion asking for a permit to do an exploratory drilling, and it has already taken 5 or 6 years to obtain this permit; it still is not issued.

And I understand that, while there is split jurisdiction—EPA has jurisdiction over Clean Air; Department of Interior is involved in that permit, as well—it is my understanding that the Department of Interior intends to issue its decision sometime this month. Is that correct, Mr. Nedd?

Mr. NEDD. Mr. Chairman, I do not have information on that issue, and so I will be glad to take back that question and see if we can——

Mr. WHITFIELD. Are you aware of the issue at all?

Mr. NEDD. Vaguely, but not enough to speak to it, Mr. Chairman.

Mr. WHITFIELD. OK. Well, then I will dismiss the first panel. Once again, thank you very much for being with us and offering your testimony.

At this time, I would like to call up the second panel.

And on the second panel we have with us this morning Mr. Lynn Helms, who is the director of the North Dakota Department of Mineral Resources. We have Mr. Thomas Clements, who is the owner of the Oilfield CNC Machining company. We have Mr. Reed Williams, who is the president of WillSource Enterprise. We have Ms. Christy Goldfuss, who is the director of the Public Lands Project for the Center for American Progress Action Fund. We have the Honorable Dan Sullivan, commissioner of the Alaska Department of Natural Resources; Ms. Kathleen Sgamma, vice president, Government and Public Affairs, Western Energy Alliance; and Mr. Corey Fisher, who is the assistant energy director for Trout Unlimited.

So I want to welcome all of you panel members here this morning. We appreciate your being with us. We look forward to your testimony.

And as you know, each one of you will be given 5 minutes to give your opening statement. And as I said before, there is a box on the table, two small boxes, and they have red, green, and yellow. And when it turns red, that means your time is up, but we will go on and let you complete your testimony.

So, once again, welcome. Thank you for being here.

And, Mr. Helms, we will begin with you for your opening statement, and you will be recognized for 5 minutes.

And I would ask each one of you, when you give your opening statement, make sure the microphone is close and it is turned on. Thank you.

STATEMENTS OF LYNN D. HELMS, DIRECTOR, NORTH DAKOTA INDUSTRIAL COMMISSION, DEPARTMENT OF MINERAL RESOURCES; DAN SULLIVAN, COMMISSIONER, ALASKA DEPARTMENT OF NATURAL RESOURCES; THOMAS CLEMENTS, OWNER, OILFIELD CNC MACHINING, LLC; KATHLEEN SGAMMA, VICE PRESIDENT, GOVERNMENT AND PUBLIC AFFAIRS, WESTERN ENERGY ALLIANCE; REED WILLIAMS, PRESIDENT, WILLSOURCE ENTERPRISE, LLC; CHRISTY GOLDFUSS, DIRECTOR, PUBLIC LANDS PROJECT, CENTER FOR AMERICAN PROGRESS ACTION FUND; COREY FISHER, ASSISTANT ENERGY DIRECTOR, SPORTSMEN'S CONSERVATION PROJECT, TROUT UNLIMITED

STATEMENT OF LYNN D. HELMS

Mr. HELMS. Well, thank you, Mr. Chairman.

Chairman Whitfield and members of the committee, I am delighted to have this opportunity to discuss with you the renaissance that is occurring in the State of North Dakota due to oil and gas production and energy production.

As you have heard before, the Bakken Formation is the largest continuous resource that the USGS has assessed in the lower 48 States. We place the oil in place in this resource at approximately 300 billion barrels. We currently think we can recover, with today's technology, somewhere between 7 billion and 15 billion barrels of that. I think the exciting thing is that a 1 percent increase in recovery from that represents 5 months' energy supply or oil supply for the entire United States.

North Dakota is growing in all energy sources. Rather than contrast renewable versus fossil fuels and that sort of thing, North Dakota has had a policy of looking for synergies. And one of our synergies is, we have the only place where anthropogenic CO2 is being captured, and it is sent to Canada, to Saskatchewan, for enhanced oil recovery. We are looking forward to using CO2 from our coal-fired generation as well as our ethanol plants for enhanced recovery in the Bakken.

This has created growing employment in the State of North Dakota, rapidly growing employment. We have moved from number eight, as you stated, to number two in the States among daily oil production. It has brought investments in pipelines and gas processing, electric generation. And we are looking at a long-term sustained employment growth of well in excess of 65,000 jobs in North Dakota.

I know it has been brought into question as to whether that is scalable. I believe it is 100 percent scalable, both upward and downward. I have looked at the Fort Berthold Reservation, in particular, where Bakken development has taken place, and their unemployment has gone from 40-plus percent to less than 5 percent, with tremendous growth in job opportunities and economics on that reservation. And I think if you look at Texas, it is a larger economy than North Dakota, but it is experiencing the same kind of growth as a result of oil and gas development in the Eagle Ford shale.

North Dakota's geology is perfect for 21st-century technology application. We have the entire stratographic column; each basin is unique. Not all States have that. That is why oil and gas should

be and is currently regulated at the State level, because it isn't consistent across the entire United States. It varies from basin to basin and State to State.

Our geography, too, is perfect. As you stated, 82 percent of the minerals in North Dakota are owned by private parties; 89 percent of the surface is owned by private parties. And it is that connection, those private contracts and their protection under North Dakota State constitution that has allowed the Bakken boom to take place.

If you look at the map that I presented in my written testimony, on page 3 you will see a couple of large holes in the development. Those holes are where the Federal Government controls the surface and the minerals, and they are being delayed by Federal policies in terms of development.

Our drilling rig count mirrors that ownership. And, you know, I sort of bristle at the fact that the Federal Government makes a big deal out of multiple use of its lands. Private owners engage themselves in multiple use, as well. It is just that they don't look at just a single use for each tract of land, but they are willing to farm the land and have an oil well on it at the same time. Or they are willing to have an oil well on their land and have an elk farm or a wildlife refuge.

North Dakota has worked hard to create a stable tax and regulatory environment that promotes capital investment. Our oil and gas rules are modified every 2 years. Just this April, we upped our rules to include banning reserve pits, increasing bond requirements, and strengthening our hydraulic fracturing requirements. And had Mr. Mufson of The Washington Post contacted us, he would have been informed about that, and I think the Washington Post article would have been very different.

We have submitted our comments to the Bureau of Land Management and the EPA on their hydraulic fracturing policies and guidance. We are opposed to these in many areas. I have identified the six primary areas, but the main one that I want to identify is, this really is a States' rights issue. Geology varies from State to State, and it should be regulated at the State level. And when you look at the BLM rules, they go way beyond their jurisdiction into things like the source that the water is going to come from and the path that it is going to take from source to fracturing well.

That concludes my prepared remarks, and I will be happy to answer questions when the time comes.

Mr. WHITFIELD. Well, Mr. Helms, thank you very much.

[The prepared statement of Mr. Helms follows:]

U.S. House of Representatives
Committee on Energy and Commerce
Subcommittee on Energy and Power
August 2, 2012
2123 Rayburn House Office Building, Washington, DC

Summary of Testimony by Lynn D. Helms, Director
North Dakota Industrial Commission
Department of Mineral Resources

North Dakota's Bakken Resource

- The Bakken Formation is the largest continuous resource in the lower 48 states. It underlies 15 thousand square miles in North Dakota.
- North Dakota is the second largest daily crude producing state in the United States.
- Increased production has increased demand on needed workforce, exceeding 35 thousand new workers.
- North Dakota has the lowest unemployment rate in the country.
- North Dakota has ideal geology to utilize 21st century unconventional resource play technologies of horizontal drilling and hydraulic fracturing.
- Predominant private mineral ownership has made Bakken development possible.
- North Dakota recently made aggressive rule changes and has increased staffing by 20 percent, with total staffing increases expected to reach 30 percent.
- North Dakota has submitted comments to the Environmental Protection Agency as well as the Bureau of Land Management on federal rule changes and guidance regarding Hydraulic Fracturing.

U.S. House of Representatives
Committee on Energy and Commerce
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Testimony by Lynn D. Helms, Director
North Dakota Industrial Commission
Department of Mineral Resources

North Dakota's Bakken Resource

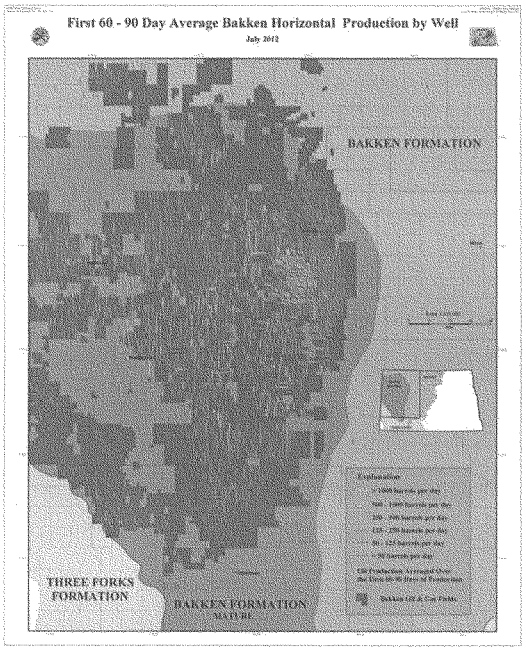
The Bakken Formation is a large unconventional resource that underlies most of the western portion of the state of North Dakota. The United States Geological Survey stated in their April 2008 report that it is the largest continuous resource they have assessed in the lower 48 states.

The upper and lower members of the Bakken formation are world class source rocks. Published estimates of Bakken oil generation potential range from 10 billion barrels (Dow 1974) to 300 billion barrels (Flannery and Krause 2006). The unpublished work of Price estimated the Bakken oil generation potential at up to 503 billion barrels. The geological models presented by Price (unpublished) and by Flannery and Kraus (2006) were based on considerable input from North Dakota Geological Survey geologists, samples from the North Dakota Core and Sample Library, and the well files from the North Dakota Oil and Gas Division.

The original oil in place in the Bakken and Three Forks Formations within the thermally mature portion of the State of North Dakota is estimated by the North Dakota Department of Mineral Resources to be over **300 billion barrels**. This estimate validates the highest oil generation estimates of Price (unpublished) and Flannery and Kraus (2006).

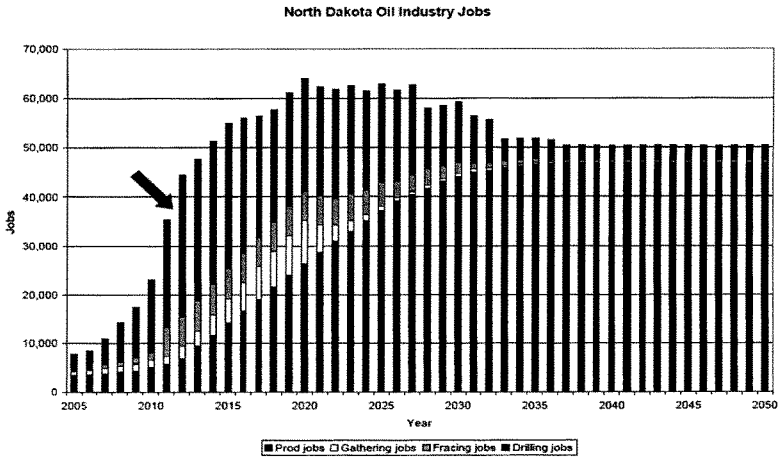
The Bakken estimated ultimate recovery using current drilling and completion practices has been estimated at between **2.5- 5.0 percent** of original oil in place, which is equal to **7–15 billion barrels.** North Dakota Bakken wells are still undergoing adjustments and modifications to the drilling and completion practices. Technology and the price of oil will dictate what is ultimately recoverable from this formation. A one percent increase in recovery equals three billion barrels, which is equal to five months of United States consumption.

The thermally mature portion of the Bakken underlies 7-9 million acres in western North Dakota. The current North Dakota drilling rig fleet is capable of drilling 2,000-2,500 wells each year. This means that full development could require 16 to 18 years.

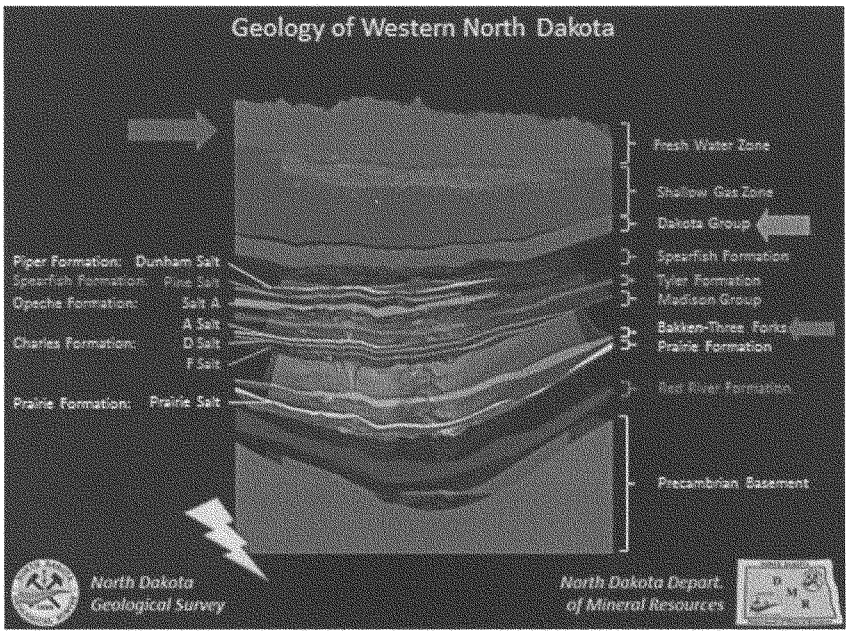


Production from Bakken development has moved North Dakota from number eight to number two among US states in daily production. To achieve those production levels has required significant increases in pipeline, natural gas processing, electric generation and transmission, and refining capacity.

Workforce has now exceeded 35 thousand new workers and is not expected to peak until 2020 at approximately 65 thousand or more than 10 new hires per day. These new workers and their families will need housing, medical facilities, schools, recreation facilities, and all of the other services expected by our modern culture.



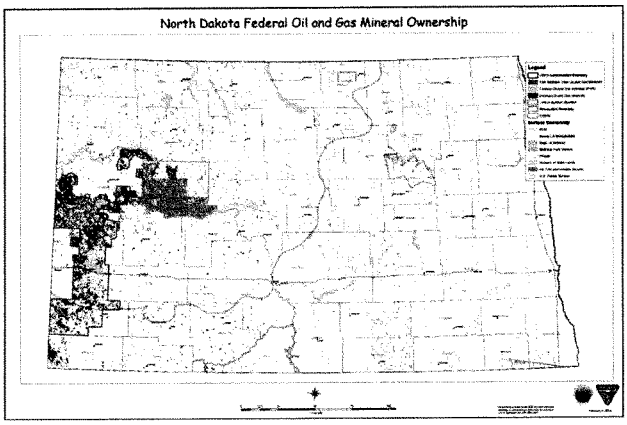
North Dakota geology is ideal suited for application of 21st century unconventional resource play technology using horizontal drilling and hydraulic fracturing. The figure below illustrates how drinking water resources are separated from the disposal zone by ½ mile of bentonite shale and from the hydraulic fracturing in the Bakken pool by 1 ½ miles of rock that includes nine layers of impermeable salt that cannot be fractured. In addition the disposal zone is approximately two miles above the basal granite where earthquakes originate.



Not only is North Dakota geology ideally suited to unconventional resource development, but our geography is ideal as well. Western North Dakota is predominantly rural rolling prairie and mineral ownership is 82 percent private, 12 percent federal, and six percent state while surface ownership is 89 percent private, nine percent federal, and two percent state. It is this private ownership and the protections afforded private contracts in our state constitution that have made the development of the Bakken possible.

For example of the current 206 drilling rigs operating in North Dakota 171 are operating on private, two on state, 28 on Indian Trust, and five on other federal lands. This is primarily due to the length of time required to obtain a federal drilling permit. These permits typically involve approval from more than one federal agency and more than six months to process compared to a drilling permit on private lands that involves a single state agency and approval time of 20-30 days.

While the federal permitting process may make sense where large blocks of land are managed for federal ownership or trust responsibilities, the following map illustrates that with the exception of Fort Berthold Reservation and the Dakota Prairie Grasslands federal mineral tracts are small parcels that resulted from right of way acquisitions and bankruptcies.



In nearly every one of these parcels, the surface estate has been sold; resulting in a split estate situation where the processes required to obtain a federal permit impose regulatory burdens and development delays on private property owners.

Following is a discussion of federal ownership in the current 7,289 Bakken pool spacing units in North Dakota:

> 91 percent of all Bakken spacing units contain some federal mineral ownership or trust responsibility.
>
> In one-half of all spacing units federal mineral ownership or trust responsibility is less than 40 percent.
>
> Outside of Fort Berthold reservation 34 percent of spacing units contain less than 160 acres of federal minerals. This is not enough ownership to determine whether development will occur, but is enough to prevent or delay the drilling of up to one half the potential wells in the spacing unit. Federal rules will not permit a well bore to penetrate a federal mineral tract, no matter how small, without a federal lease and a federal drilling permit. The current BLM hydraulic fracturing rule proposal will also require pre-approval of fracturing processes and chemicals.

North Dakota has worked hard to create a stable tax and regulatory environment that promotes capital investment. Our oil and gas rules are reviewed at least every two years through

a public comment process where every comment must be considered in writing and a bi-partisan legislative committee reviews the final rules and rule making process. This ensures that North Dakota regulations remain consistent with new technologies, economic conditions, and legislative intent.

The Department of Mineral Resources, Oil & Gas Division made 26 rule changes, which took effect April 1, including banning the use of open reserve pits; increasing bond requirements, strengthening hydraulic fracturing requirements and mandating the reporting of chemicals used in the hydraulic fracturing process. Inspection staff has increased by 20 percent since July 2011.

The North Dakota Industrial Commission has taken the following position on recent federal hydraulic fracturing rules and guidance:

1) This is a state's rights issue. States that have adopted hydraulic fracturing rules which include chemical disclosure, well construction, and well bore pressure testing should be exempted from the BLM rules and the EPA guidance.

2) The EPA study of potential hydraulic fracturing effects on ground water mandated by congress is not finished and there are currently no proven environmental contamination incidents.

3) As Chairman Hall has testified, the required consultation with the Three Affiliated Tribes has not occurred.

4) The definition of diesel fuel in the EPA guidance is too broad. It includes six CASRNs as well as any material referred to by one of their primary names or any associated common synonyms.

5) EPA made no attempt to identify what concentrations of the materials they propose to define as diesel fuel are dangerous. Hydraulic fracturing treatments that utilize concentrations of less than 10% of any material defined as diesel fuel should be exempt from permitting requirements.

6) The EPA guidance is written for Enhanced Oil Recovery wells or disposal wells completed with tubing and packer. Most of the requirements will not work mechanically on wells completed with swell packers and fractured down the production casing as is common in North Dakota.

Mr. WHITFIELD. And, Mr. Sullivan, you are recognized for 5 minutes.

STATEMENT OF DAN SULLIVAN

Mr. SULLIVAN. Thank you, Mr. Chairman. And I have a PowerPoint slide. I don't know if it is going to be brought up, but I think some of you have that before you, in addition to my written testimony.

And what I would like to do very quickly—I appreciate the opportunity, Ranking Member Rush, to testify in front of the committee today.

I would first like to start, if you will go to the next slide, just a little bit of background on Alaska. It is hard to see here, but obviously the numbers of the State, quite large. I am sure the members of the committee from Texas have seen that first bullet under "Land Base" a couple times, but more than twice the size of Texas, of course. But a lot of Federal land in Alaska, State land, native land.

Next slide, please.

With regard to the estimates, we have huge estimates of both conventional oil and gas. The USGS did a survey 2 years ago. In terms of the arctic, estimates are the largest amount of oil of any arctic nation, including Russia. And we are just scratching the surface because the unconventionals in Alaska, again, are off the charts.

But very little, a tiny fraction of production in Alaska is from Federal lands. It is actually, in terms of the North Slope oil, it is less than half of a percentage point. So everything else is from State lands.

Next slide.

Also, very large amounts of strategic and critical minerals, including rare earth elements, we believe. And that slide shows that if Alaska were its own country, we would rank in the top 10 in many of those categories.

Next slide.

As Congressman Barton noted, States—in Alaska, we certainly take pride in this—love, deeply care about our environment. The next few slides touch on what we think are some of the highest environmental protection standards that are based on State regs and State law literally in the world. So if you look at this slide, the next slide.

And then we have also been the jurisdiction that has spurred many of the industry's most sustainable and environmentally responsible technological innovations. So if you look at that slide there, it shows the number of innovations that have occurred in Alaska.

Next slide, please.

But this next slide is really the point, supports the broader main point of my testimony today, Mr. Chairman, which is: The U.S. is on the verge of a sustainable energy renaissance that will have dramatic positive benefits for America and its citizens. And it is based on three strengths that we have as a country that pretty much no other country has. And those are listed, the strengths are listed there: an enormous natural resource base; leaders in environ-

mental high standards; and then a financial and legal system that encourages entrepreneurship, private-sector investment.

So this sustainable energy renaissance could have very broad-based benefits. In slides 9 and 10, I mentioned these. I would be glad to talk about them during the Q&A. But everything from energy security, economic growth, jobs, U.S. trade deficit, Federal budget deficit, foreign policy and national security implications, and even global environmental protection.

But on that resource base point, I know PFC Energy and many others—Mr. Sieminski today also named some numbers. But there are estimates that the U.S. could be the largest hydrocarbon producer by 2020, larger than Saudi Arabia, larger than Russia.

Next slide, please.

But what we think is critical in order to seize this strategic opportunity, we must focus on regulatory reform and modernization and increase access to Federal lands, particularly in Alaska.

Last year, Mr. Chairman, I had the honor of testifying before this committee and highlighted several areas where delay and new policies by the Federal Government were undermining responsible resource development in Alaska. Many of these are listed in the appendix to my current written testimony. And as you have mentioned, alluded to, one of the most egregious ones we have seen in Alaska is the on-again-off-again long delays in the permitting for Shell to explore exploration wells in the Outer Continental Shelf of Alaska. Those wells have been drilled before out there; that is often overlooked in the debate. Numerous OCS wells in Alaska have been drilled.

Finally, Mr. Chairman, I just want to conclude that on the regulatory reform and modernization front, I know the House has taken up many bills. Many States are enacting this kind of efficient, more certain, more timely permitting reforms. Canada, as a country, is undertaking a top-to-bottom review. And that doesn't mean cutting corners on environmental protection, but it is important to fully realize our potential.

In Alaska, we have a goal, a comprehensive goal, of achieving a million barrels a day within 10 years through the trans-Alaska pipeline system. We have undertaken a comprehensive tax reform, permitting reform, infrastructure, marketing. Mr. Helms is now number two in production. We want to get back to number two and eventually get back to number one. We think we certainly have the resource base to do that, but we need the Federal Government as a partner in achieving that million-barrels-a-day goal, not as an obstacle.

Thank you very much, Mr. Chairman.

Mr. WHITFIELD. Thank you, Mr. Sullivan.

[The prepared statement of Mr. Sullivan follows:]

Testimony before the U.S. House of Representatives
Subcommittee on Energy and Power

The American Energy Initiative

August 2, 2012
Submitted by:
Dan Sullivan, Commissioner
Department of Natural Resources
State of Alaska

I. Introduction

Chairman Whitfield, Ranking Member Rush, and members of the House Subcommittee on Energy and Power, on behalf of Governor Sean Parnell, the State of Alaska welcomes this opportunity to testify as part of this Committee's important work on the American Energy Initiative. More specifically, we want to emphasize to this Committee and to the rest of your colleagues in the U.S. Congress that the United States is on the cusp of an energy and responsible resource development renaissance which will have enormous benefits for our country and citizens. But in order to fully seize this strategic opportunity, we must modernize and reform our federal permitting system and increase access to energy production on federal lands.

Biographical Information

Before getting into substantive matters, I would like to briefly mention my professional background as it pertains to this testimony. I have been serving as commissioner of the Alaska Department of Natural Resources (DNR), a state agency of over 1,100 personnel, since December 2010. DNR is responsible for managing Alaska's vast land, energy, and natural resources with approximately 100 million acres of uplands, 60 million acres of tidelands, shore lands, and submerged lands, and 40,000 miles of coastline. DNR manages one of the largest portfolios of oil, gas, minerals, land, water, timber, and renewable energy in the world.

Prior to being appointed as the DNR Commissioner, I served as Alaska's Attorney General. One of my areas of focus was issues relating to natural resource management and development. From May 2006 to January 2009, I served as the U.S. Assistant Secretary of State for Economic, Energy, and Business Affairs, where much of my work focused on international energy issues, including serving as the U.S. Governing Board member of the International Energy Agency. Prior to my time as U.S. Assistant Secretary of State, I served as a Director in

the International Economics Directorate of the National Security Council and National Economic Council staffs at the White House. I am also a United States Marine, having served on active duty and in the reserves as an infantry and reconnaissance officer since 1993. I am currently a Lieutenant Colonel in the Marine Corps Reserve, serving as the Executive Officer of the 4th Marine Division's Anti-Terrorism Battalion.

Overview of Today's Testimony

The United States is on the cusp of an energy renaissance involving domestic production of natural resources ranging from clean renewables to hydrocarbons.

In particular, domestic hydrocarbon production – both conventional and unconventional oil and gas – is increasing dramatically. This growth presents a strategic opportunity for our nation and it is driven by two trends. First, new technology is unlocking unconventional resources such as shale-derived oil and gas. Second, there is growing recognition that the U.S. still has an enormous resource base of conventional oil and gas, particularly in Alaska.

However, our nation has a complex regulatory system that almost guarantees large-scale, domestic resource development projects will be tied up in years of permitting delays and costly litigation. Such a system significantly undermines our economic opportunities, foreign policy objectives, and national security interests. It also undermines, rather than promotes, global environmental protection and stewardship. Alaska stands ready to be a critical partner with the federal government to undertake a comprehensive modernization of our regulatory system, which will allow us to resume leadership in energy production and responsible resource development.

My testimony will focus on the following:

- The United States is uniquely positioned to regain its standing as the global leader in energy production and responsible resource development.
- An American energy renaissance will result in broad-based economic and foreign policy benefits.
- To fully seize this strategic opportunity, we must modernize and reform our regulatory and permitting system, which currently undermines U.S. interests.

The benefits and the challenges we will face in assuming leadership in these areas are discussed below, using examples from Alaska, one of our nation's greatest sources of natural wealth. As this testimony will demonstrate, the State of Alaska supports legislative measures that bring clarity, certainty, and timeliness to the permitting process and therefore is in favor of several bills that are currently being considered by the U.S. House of Representatives.

II. The United States: Uniquely Positioned for Strategic Opportunity in the 21st Century

The United States possesses three key strengths that will enable our country to regain its standing as the global leader in energy production and responsible resource development. We are the leading world power that combines these strengths, and we can use them to bolster our economy and promote our national security interests.

A. An Enormous Resource Base

A few years ago, many believed our nation was running out of the natural resources needed to power our economy. Indeed, since the oil shocks of the 1970s, a sense of chronic energy scarcity and vulnerability has dominated American thinking. But recent innovations in unconventional oil and gas extraction have upended the conventional wisdom. Hardly a day goes by without fresh evidence of the United States regaining its status as a hydrocarbon superpower. A few years ago, we were preparing for large-scale natural gas imports due to diminishing supplies.

Today, our nation has by some estimates a 100-year supply of gas and the federal government is now focused on the extent to which to allow gas exports. Oil production, at 6 million barrels a day, is back to levels not seen in almost 15 years, making the U.S. the world's third-largest producer. And U.S. natural gas production is approaching record levels. These trends are likely to continue. PFC Energy predicts that by 2020, the U.S. will be the largest hydrocarbon producer in the world – exceeding Saudi Arabia and Russia. This is a bold prediction, but federal agencies back that up, estimating that the United States has more than a trillion barrels of technically recoverable oil and more than 1,000 trillion cubic feet of natural gas, including both conventional and unconventional resources.

Furthermore, a significant amount of our nation's conventional oil and gas resources remain on Alaska's North Slope and in offshore waters. This region contains more oil than any comparable region in the Arctic, including Russia, with approximately 40 billion barrels of technically recoverable oil and more than 200 trillion cubic feet of conventional gas, according to federal estimates. These numbers are likely dwarfed by Alaska's unconventional resources, such as shale oil and gas, heavy and viscous oil, and gas hydrates.

The United States is also a storehouse for strategic minerals. The U.S. Geological Survey's *National Mineral Resource Assessment* shows that the United States likely contains at least as much undiscovered gold, silver, copper, lead, and zinc as has already been found. This includes estimates of 36,000 tons of gold, 830,000 tons of silver, 600,000 kilotons of copper, 130,000 kilotons of lead, and 290,000 kilotons of zinc. At today's prices, the gross value of gold, silver, copper, lead, and zinc in undiscovered deposits is estimated to be $1.2 trillion. There are also growing indications that the United States and Alaska in particular, possess substantial,

untapped deposits of rare earth elements, which are critical to our high tech, defense and renewable energy industries. Currently, China produces more than 95 percent of the world's rare earth elements, and according to the United States, is using this monopoly position in a way that violates World Trade Organization rules.

B. Leadership on Policies that Protect the Environment

Resource development cannot happen in a vacuum. In order to be sustainable, it is imperative that this sector of the U.S. economy be supported by strong laws and regulations to ensure environmental protection, promote transparency and prevent corruption. This is another area in which the United States plays a leading global role. And while many other countries may pay lip service to these policies, the United States has for decades put them into action by enacting strict laws and high standards, and by spending billions of dollars on enforcement.

Laws passed more than forty years ago such as the National Environmental Policy Act, the Clean Water Act, and the Clean Air Act are comprehensive measures designed to protect our environment. These laws have had significant positive impacts on American citizens and their communities in the form of cleaner air and water, while enhancing the health, well-being, and life spans of countless Americans.

Most states have enacted strong environmental standards as well. Alaska, with its abundant wildlife and vast wilderness, maintains some of the world's highest standards of environmental protection. Alaska's constitutional mandate is to pursue responsible resource development, sustainability of its abundant wildlife, and stewardship of the environment.

C. A Stable Legal and Financial System that Spurs Investment and Innovation

Driven in part by our abundant resources, Americans have led resource development innovations for more than a century, creating entire industries where none previously existed. Our leadership in developing new technologies and best practices for resource development is possible because we have a stable legal, political, and capital finance system that spurs innovation and investment, protects property rights, and provides access to capital for companies and individuals with innovative ideas. These economic strengths have contributed to the success of various American industries and have also been instrumental to the development of our natural resources.

It is not just large companies that drive our country's economic growth. Some of the most important technological innovations in resource development in recent years have been led by smaller, more nimble companies whose ideas have transformed the energy sector. The shale revolution is the latest example of this phenomenon.

III. The Benefits of An American Energy Renaissance

The benefits of using our unique combination of strengths to pursue increased domestic resource development are numerous, tangible, and already being felt across the country.

Energy security. Increasing production of all types of American energy sources – hydrocarbons, minerals, and renewables – will increase our domestic supplies, lower the price we pay for them, and lessen our dependence on other countries that supply such resources.

Economic growth and jobs. Responsible development of our own resources means tangible growth in economic activity and jobs. The large volumes of gas being produced in places like Texas, Ohio and Pennsylvania due to the shale gas boom are re-industrializing these regions. A Pricewaterhouse Coopers study from last year predicted that the shale gas boom would result in a million new U.S. manufacturing jobs by 2025. Citigroup is more bullish, estimating that as many as 3.6 million new jobs could be created by 2020. Our country clearly needs job growth of this magnitude. Resource development jobs are typically high paying and give workers pride in supplying a vital product for their country. In Alaska, for example, the average wage in the mining industry is close to $100,000 per year. Further, one need only look at states like North Dakota and Texas, or countries such as Canada and Australia, where unemployment rates are low or virtually nonexistent, to recognize the job and wealth-creating power of a strong resource development economy.

U.S. trade deficit. Over half of the U.S. trade deficit results from oil imports. Citigroup estimates our trade deficit could decrease by as much as 60 percent by the end of this decade if domestic oil production continues to grow. The trade deficit could fall even further if we increase the export of our energy products. The U.S. recently has become a net exporter of highly-refined petroleum products. Increased liquefied natural gas (LNG) exports might be next. Alaska is the only state currently exporting LNG to Asia, reliably supplying Japan with gas for more than forty years. A dramatic increase in the amount of LNG exports from Alaska to the Pacific Rim is possible given the March 2012 announcement by the CEOs of ExxonMobil, ConocoPhillips, and BP on their alignment with the state to pursue a potential large-scale Alaska LNG export project. Based on conservative pricing and volume estimates, this one project could produce upwards of $140 billion in U.S. exports over a 20-year period.

Federal budget deficit. One of the most significant challenges facing the United States is our large and growing budget deficit. However, a vibrant resource development sector can significantly help the United States address its fiscal problems without having to rely on tax increases, and revenues from resource development on federal lands can significantly reduce federal budget shortfalls. For example, the consulting firm Northern Economics and the University of Alaska's Institute for Social and Economic Research (ISER) estimate that oil production from federal waters off Alaska's northern coast could bring federal revenues of approximately $167 billion over a 50-year period. The estimated economic activity generated by

such a development – 55,000 jobs throughout Alaska and the United States and $145 billion in payroll – also would significantly boost federal revenues.

Foreign policy and national security. Reducing our dependence on foreign sources of hydrocarbons will undoubtedly provide benefits to U.S. foreign policy. Additionally, by providing our long-standing allies and important economic partners with increased supplies of energy from the United States, we can deepen our economic and energy relationship with them and enable them to be less dependent on traditional gas exporters such as Russia and Qatar. The foreign policy and national security benefits of such a shift for the United States, as well as for countries receiving greater volumes of Alaska gas, would be substantial.

Global environmental protection. Global environmental protection would also benefit from increased production of natural resources from the United States. This point may seem counterintuitive, but experience bears it out. The United States, as well as states like Alaska, has some of the highest environmental standards in the world. However, when federal regulators delay or shut down resource development projects in the U.S. in the name of environmental protection, it merely drives them to countries with much lower environmental standards. The result is a degradation of the global environment.

IV. Challenges: A Regulatory System That Undermines American Interests

The United States is uniquely positioned to seize the strategic opportunity and benefits that will come from more fully developing our own natural resources. But obstacles remain, the most significant being a regulatory system that is out of balance, resulting in significant delays and costs which ultimately undermine U.S. interests.

A. A Problem to Be Managed, not an Opportunity to be Seized

For too many years, major resource development and related infrastructure projects in the United States have come to be viewed as problems to be managed rather than opportunities to be seized. The recent on-again, off-again saga around the permitting of the Keystone XL oil pipeline from Canada is just the latest example of this problem.

Although Keystone XL has received the most national attention, it is a fairly typical example of a federal permitting system gone awry. During the past three years, Alaskans have witnessed numerous Keystone-like regulatory decisions that have had the effect of delaying, undermining and potentially killing major resource development projects. Last year before this Committee, I had the opportunity to present some of the challenges Alaska faces in pursuing oil and gas development on both federal and state lands. Attachment 1 is an update of the list of federal actions that have delayed responsible resource development in Alaska.

The most dramatic example of federal regulatory delay in Alaska involves Shell Oil Company's attempts to explore for oil in the federal waters off the coast of Alaska. Despite having spent close to $5 billion, including billions of dollars in lease payments to the federal government, and over five years of preparation work, Shell has yet drill to one exploration well in the federal waters off the coast of Alaska as of this writing. Unlike the Gulf of Mexico, exploration development in Alaska's Outer Continental Shelf (OCS) takes place in very shallow water – 100 to 150 feet – and previously Shell and other companies safely drilled scores of exploration wells in these areas and other parts of Alaska's OCS. Yet, the federal government has moved at a snail's pace in issuing the dozens of permits required for the drilling of a single exploration well. In testimony before the U.S. House Subcommittee on Energy and Power in April 2011, a senior Shell official noted that in the time his company was waiting for federal approval to drill one exploration well off the coast of Alaska, it had drilled over 400 exploration wells in other basins around the world.

Although Shell has already scaled back its plans for this summer, uncertainty still exists as to whether the company even will be able to drill. The Department of Interior has stated that it will issue its final decision on allowing Shell to drill this summer by August 15.

Furthermore, the Obama Administration's Five Year Outer Continental Shelf Oil and Gas Leasing Program has been hailed as an expansion of energy development in the region. In fact, it will remove large areas from consideration for drilling without consultation with the State of Alaska and without Congressional approval. Since this federal administration has been in office, it has stopped all Arctic OCS leasing and derailed what were once certain, predictable leasing plans accepted by both Democratic and Republican administrations in Washington, D.C.

B. Regulatory Delay and Endless Litigation

In recent years, regulatory delay in the United States has become the rule rather than the exception. Over the years, Congress and the executive branch have developed and accepted a regulatory system that almost guarantees significant delay and endless litigation for resource development projects.

Take for example the minerals sector in the United States. In 2012, the investment firm Behre Dolbear Group's annual global survey of the mineral sector ranked the United States the lowest out of 25 countries in the category of "permitting delays" tying with Papua New Guinea. This was attributed to the fact that because of federal rules that states are bound to enforce results in a 7- to 10-year waiting period to complete permitting work before mine construction and development can begin in the United States. By contrast, in other industrialized countries like Australia and Canada, the average permitting time is about three years.

Overlapping jurisdictions and the endless opportunities provided to opponents of resource development to litigate a project add to these permitting delays. Alaskans witness this type of litigation on almost every resource development or infrastructure expansion project in the state.

C. Jobs and the Environment are Undermined

Unfortunately, potential investors have expressed reluctance to pursue resource development projects in the United States and Alaska, in particular, because of the risk of permitting delays and litigation. We believe that such a reputation discourages investment, significantly hurts job creation and undermines global environmental protection. By discouraging responsible development in our own country, we are passing energy and mineral investment to countries with substandard environmental regulations and little capacity or desire to protect the environment. Take the Russian hydrocarbon sector. Last year, some of America's largest energy companies announced multi-billion dollar investments in the Russian Arctic, even though the U.S. Geological Survey estimates that offshore and onshore Alaska has greater oil potential. The fact that the U.S. regulatory system has delayed or blocked many hydrocarbon development projects in Alaska was likely a factor driving American companies to invest in Russia.

Alaska has some of the world's most comprehensive environmental protections regarding the oil sector. And Russia? Last year, the Associated Press investigated Russia's abysmal record regarding oil spills and pollution. The estimates given in the AP article ranged from 5 million to 20 million tons of oil leaked a year. Even at the lower end, that would be the equivalent of a Deepwater Horizon blowout about every two months. Russia experienced approximately 18,000 oil pipeline ruptures in 2010 – the figure in the U.S. for the same year was 341.

Clearly, the global environment would be much better off if hydrocarbons and other natural resources were produced in countries with the highest environmental standards rather than some of the lowest. Yet, the significant flaws in our own system are partly to blame for the investment in lax overseas jurisdictions where environmental degradation is common.

D. The Good News: Growing Consensus that Regulatory Reform and Modernization is Needed

The good news is the growing recognition that something serious needs to be done. *The Economist* recently ran a cover story called "Over-regulated America" in which it concluded that "America needs a smarter approach to regulation" that will "mitigate a real danger: that regulation may crush the life out of America's economy." Former President Bill Clinton has weighed in similarly. In a *Newsweek* article last year, he lamented that it can take three years or more to permit major economic development projects. His number one recommendation to put Americans back to work was to speed up the regulatory approval process and grant state waivers on environmental rules to hasten start times on construction projects.

We recognize that there are efforts to reform our regulatory system that are being undertaken by the U.S. House of Representatives and I testified last year in support of the U.S. House Natural Resources Committee's American Energy Initiative. The introduction and passage from committee of H.R. 4382 *Providing Leasing Certainty for American Energy Act* and H.R. 4383 *Streamlining Permitting of American Energy Act* are steps in the right direction and we hope that these two bills will be passed on the House floor and transmitted to the U.S. Senate. Another positive sign has been the House passage of H.R. 4402, *National Strategic and Critical Minerals Protection Act*.

Alaska, other states and Canada are not waiting for federal regulators to take action. They are undertaking reforms to make state permitting processes more efficient, timely, and certain. States as politically diverse as Alaska, California, Massachusetts, Indiana, and Kansas are fully engaged in modernizing their regulatory systems. This is a bipartisan effort driven by policymakers' recognition of the economic benefits of allowing large-scale development projects to proceed in a responsible manner.

V. Conclusion: The Opportunity is Here, We Must Seize It

Fully repositioning the United States as the world's global leader in responsible resource development is within our reach. As we look to this promising future, federal policy makers should focus on some key actions to help us achieve this goal.

Undertake comprehensive permitting reform and modernization. This does not mean cutting corners on environmental protection. It is possible to responsibly develop resources and be good stewards of the environment. For example, Alaskans were warned that the trans-Alaska pipeline and North Slope oil fields would decimate caribou herds. The opposite has happened. The caribou herd that summers at Prudhoe Bay, the nation's largest oil field, has grown by the tens of thousands. States are now leading the way on permitting reform efforts. Canada is also undertaking a top-to-bottom effort to modernize and bring certainty to its regulatory system. The federal government should draw from these examples to redouble its efforts to enact comprehensive reforms. This also means opening more federal lands to responsible resource exploration and development.

Work with and learn from the states. The recent dramatic upswing in oil and gas production in the United States has had little to do with federal policies. In fact, many would argue that it is happening in spite of federal policies. The real action has been with the states. In Alaska, for example, state leaders are embracing permitting reform as well as developing and implementing comprehensive strategies to increase oil production, spur more LNG exports to Asia, and create a domestic supply of rare earth minerals. The federal government should take a more cooperative approach in working with states on natural resource development and energy strategies rather dictating polices from Washington with little state input or involvement.

A domestic energy and resource development renaissance lies ahead which will significantly benefit our country and citizens. We should embrace it.

Attachment 1

Excerpts from April 13, 2011 Testimony before the U.S. House of Representatives Subcommittee on Energy and Power (Updated August 2, 2012)

Many of the most promising oil and gas resources in Alaska are on federal lands. Development of these lands, in particular from the OCS, ANWR, and NPR-A, could result in production of over a million barrels of oil a day. Unfortunately, the federal government has consistently restricted access to these lands, made decisions that have added significant delays to promising projects, and pursued policies that have chilled the investment climate.

More specifically, the federal government has a made a series of decisions that prevent or stall responsible development of domestic energy.

NPR-A (A Region Specifically Set Aside for Oil Exploration and Production)/CD-5 Permit Denial

In 2010, the U.S. Army Corps of Engineers (Corps) derailed ConocoPhillips (CP) development of CD-5, which is a field on the eastern edge of the National Petroleum Reserve-Alaska (NPR-A). Once infrastructure is in place, it will open satellite fields in the eastern NPR-A to development. The State, CP, and Native communities worked with the Corps for years on the project to ensure that responsible safeguards are in place to open this field to development. In response to concerns raised by some stakeholders, the project was modified to minimize environmental impacts and the project garnered strong support from all stakeholders. After years of collaboration, the permits were considered a foregone conclusion. The first production from CD-5 was expected to start in 2012.

Nevertheless, the Corps reversed course and denied CP's permits to construct a drill pad, a pipeline/vehicle bridge across the Nigliq Channel in the Colville River Delta, and access roads. The Corps concluded that there are practicable alternatives to the bridge, drill pad, and roads that would have fewer environmental consequences. This decision was apparently impacted by the EPA's designation of the Colville River as an Aquatic Resource of National Importance (ARNI)[1], in which the EPA can determine that issuance of a permit will result in unacceptable adverse impacts.

More specifically, the District Engineer found that CP should use Horizontal Directional Drilling (HDD) under the Nigliq Channel to access the reservoir. The HDD alternatives effectively eliminate a road, including the Nigliq Channel bridge, that would have provided

[1] An Aquatic Resource of National Importance (ARNI) is a resource-based threshold used to determine whether a dispute between the EPA and the Corps regarding individual permit cases are eligible for elevation under the 1992 Memorandum of Agreement between the two agencies—an agreement required by Section 404(q) of the Clean Water Act..

direct access between CD-5 and existing production, operations, logistics, and transportation infrastructure at the Alpine facilities, and access for local hunters to subsistence resources.

Many Alaskans viewed the Corps decision as a blanket attempt to shut-down NPR-A development. The District Engineer's decision was opposed by all the affected surface and subsurface land owners, most of them Alaska Natives. (The State owns the subsurface rights of two leases affected, as well as the Nigliq Channel river bed.)

The permit denial was eventually appealed and the Corps' Pacific Ocean Division issued a decision on December 2, 2010, remanding the District Engineer's denial of CP's permit request to the District Engineer. Nevertheless, the status of CD-5, after seven years of delays, remains uncertain, thereby chilling the investment climate over the entire NPR-A.

DOI's Wild Lands Designation

Another decision chilling the investment climate in the NPR-A and beyond is BLM's Wild Lands policy. Secretary Salazar issued Secretarial Order 3310 in December, 2010, which purportedly empowered the BLM to convert vast areas of Alaska, including the NPR-A, into a de-facto wilderness area without Congressional oversight or approval. Fortunately, Congress has so far refused to provide any funding for BLM to implement Order 3310. State officials have heard from many resource companies who have said if state lands receive a Wild Lands designation they may not continue to invest in Alaska. If it's ever implemented, the Wild Lands policy would chill the investment climate and shut down resource development in the NPR-A, an area set aside specifically for oil and gas development. Other states share our concern, and we have joined in litigation in federal district court in Utah to abolish the Wild Lands policy.

OCS Permitting Delays Shutting Down Exploration Activities

The greatest potential for significant oil and gas production lies in the OCS. In recent years, Shell and other leading energy companies have spent billions of dollars to acquire leases and explore the OCS. Shell has also received approval for several exploration plans and has acquired over 34 federal permits to drill exploration wells. Yet its exploration plans have been repeatedly derailed; first by the 9th Circuit Court of Appeals in 2008 and more recently by the DOI and the Environmental Protection Agency (EPA).

Shell has proposed drilling activities for the Beaufort Sea on its leases. In November 2006, Shell submitted the first version of its exploration plan for the Beaufort Sea region. Shell's exploration plan details its plan to drill up to twelve exploratory wells on twelve lease tracts in the Beaufort Sea between 2008 and 2011. (The lease blocks stretch from the Colville River Delta eastward to the Canadian border.)

Litigation filed by environmental groups, however, derailed these development plans. See Alaska Wilderness League v. Salazar, 548 F.3d 815 (9th Cir. 2008), vacated 559 F.3d 916 (9th Cir. 2009), dismissed as moot 571 F.3d 859 (9th Cir. 2009).

Shell submitted a new exploration plan for the Beaufort Sea, which was approved by MMS. After the MMS approved the development plan, environmental groups filed suit. In the spring of 2010, Shell, the State, and the Obama Administration successfully defended the permits before the 9th Circuit. It looked like Shell was finally going to be able to drill exploration wells in the OCS. Then the Macondo well disaster happened and the Obama Administration reversed course and suspended all operations in the OCS.

More specifically, DOI Secretary Salazar, in congressional testimony and at a press conference in Alaska, stated that he was imposing an Arctic Moratorium on OCS exploration and development. The State sued the DOI, alleging that the moratorium conflicted with several federal laws. The Bureau of Ocean Energy Management and Regulatory Enforcement (BOEMRE) responded by denying the existence of a moratorium; they then began to process Shell's exploration plan. For these reasons, the U.S. District Court granted the federal government's summary judgment motion. One day before the court's decision, however, NOAA stated in a federal register that it would not issue an incidental take authorization for Shell because DOI had suspended operations in the OCS.

Shell recently announced that it was scaling back its planned Arctic drilling this summer as it awaits resolution on one of its drill ships and testing of its oil spill containment barge. We are eagerly waiting the Department of Interior's final decision on whether to issue Shell its drilling permits. After acquiring over 34 permits in support of its drilling operations and spending billions of dollars over the past five years, Shell still has not drilled one well in the Alaska OCS.

ANWR Wilderness Designation

The USGS has demonstrated that perhaps the greatest potential in America for an onshore elephant-size field is in the 1002 Area of ANWR. Despite this potential, the federal government has consistently refused to open the 1002 Area to exploration. Most recently, the USFWS has issued a draft revised refuge management plan and EIS that evaluates whether to recommend that Congress designate the 1002 Area in ANWR as "Wilderness," which would essentially lockup ANWR from oil and gas development. The USFWS has refused to evaluate potential oil and gas activity in the refuge, and refused to consider public comments on that topic. USFWS has said that they intend to issue the final management plan and EIS this fall. The State believes that such action conflicts with federal laws—under the National Environmental Protection Act (NEPA) and the Alaska National Interest Lands Conservation Act (ANILCA), the USFWS must consider the benefits of oil and gas development before making a recommendation to Congress on a Wilderness designation.

These decisions have been made in the face of overwhelming public support for oil and gas development in the 1002 Area. Polls consistently show that over 73% of Alaskans support ANWR development. The North Slope communities, including residents of ANWR, also strongly support development. In addition, over the past 30 years almost every single member of the Alaska State Legislature has voted on resolutions in support of ANWR exploration and development.

For these reasons the state continues to protest any plan or wilderness review process that further encumbers the potential for oil and gas development on the coastal plain of ANWR. It makes no sense to the state that the USFWS wants to lock up an estimated 10 billion barrels of domestic oil. Oil and gas development in the 1002 Area would provide secure on-shore domestic supply of energy for the nation, create tens of thousands of jobs nationwide, ensure the continued operation of the TAPS for years to come, and could help meet U.S. demand for 25 years or more.

200,000 Square Miles of Critical Habitat Designated for Polar Bears

The polar bear and its habitat are already well managed and conserved by Alaska, international agreements, conservation programs, and state and federal law. These laws and policies make the polar bear one of the most protected species in the world. Nonetheless, the USFWS recently designated nearly 200,000 acres of the North Slope —which covers an area larger than the size of California—as critical habitat for the polar bear. Never before has the USFWS interpreted its authority to designate such a vast expanse of critical habitat for a species. Worse, the USFWS acknowledges that the designation will not provide significant additional conservation measures for the polar bear and its habitat and that the primary claimed threat to the species (loss of sea ice due to climate change) will not be alleviated by this designation.

Despite providing no benefits, the critical habitat designation imposes another layer of costly regulation on Alaska, its citizens, and its economy. The state and many others believe that the USFWS's massive critical habitat designation violates federal law, will impede North Slope resource development, and will generate countless lawsuits filed by environmental groups to stall every phase of an oil and gas development project. Such lawsuits would delay projects, foment regulatory uncertainty, and increase the cost of doing business in Alaska.

Ocean Zoning/Marine Spatial Planning

President Obama in July 2010 signed an Executive Order creating a new federal bureaucracy tasked with setting ocean policy and requiring marine spatial planning (ocean zoning) in all U.S. waters. Executive Order 13547 could have significant adverse impacts on commercial use and development in the oceans and coastal zone.

Point Thomson EIS Delay

ExxonMobil has committed to a Point Thomson development plan to produce approximately 10,000 barrels of natural gas condensate starting in 2014. The project's Environmental Impact Statement (EIS), however, has not been processed in a timely fashion. As a result, the start-up date for the project has been delayed from 2014 to 2015.

The U.S. Army Corps of Engineers (Corps) recently published the final EIS for the Point Thomson project, but it does not include a preferred alternative for the project, leaving serious questions about how the agency plans to proceed.

Also troubling to the State of Alaska is that the Corps has excluded state regulators from agency discussions regarding the Least Environmentally Damaging Practicable Alternative (LEDPA) for the project. The project is solely located on state lands, yet the State has been carved out of the decision-making process. Because it is not involved in these deliberations, the State may be limited in its ability to proactively plan for the numerous state permits needed for ExxonMobil to begin construction in winter 2012-2013.

Expansion of EPA's Jurisdiction Over Wetlands

The EPA and the U.S. Army Corps of Engineers have developed "Draft Guidance on Identifying Waters Protected by the Clean Water Act," for determining whether a waterway, water body, or wetland is protected by the Clean Water Act. The federal agencies draft guidance sets out a new process and standards for making jurisdictional determinations over waters and wetlands throughout the nation. The consequences of applying the guidance are that more waters and wetlands will be found jurisdictional and any activities in those waters and wetlands will be subject to lengthy and expensive permitting reviews. Expanding the EPA's jurisdiction over wetlands and waterways will have a profound impact in Alaska in light of Alaska's vast coastline (nearly 34,000 miles), over three million lakes, and over 15,000 anadromous fish streams. In addition, the State of Alaska has over 174 million acres of wetlands, more than in all other states combined. Accordingly, almost all public infrastructure development, such as schools, water and sewer utilities, roads, or airport projects -- or private infrastructure development -- involve wetlands, or in many instances, non-navigable waters.

Contrary to Congress' directive in the Clean Water Act that the EPA and the Corps consult and cooperate with the States in developing programs and comprehensive solutions to protect the nation's waters, there has been no apparent consultation with the states, certainly note with Alaska, in the promulgation of the draft guidance.

The federal agencies have also violated the Administrative Procedure Act because they have failed to go through formal rulemaking. An agency cannot sidestep its formal rulemaking requirements by merely issuing a guidance document that will influence its permitting decisions.

Clean Water Act and EPA Overreach

Although EPA now has no permit to issue for most development projects in Alaska, the agency participates in meetings regardless of Cooperating Agency status and appears to be expanding its oversight role through USACE's administration of Section 404 permitting. Citing authority under Section 404(c) of the Clean Water Act, EPA Region X has embarked upon a Bristol Bay Watershed Assessment (BBWA) to study possible impacts of development on Bristol Bay as a way to inform EPA, should it decide to enter into the 404(c) process. The State of Alaska has formally expressed its opposition to the BBWA and the preemptive use of EPA 404(c) veto authority in the absence of an actual Section 404 permit application in a March 9, 2012 letter from State Attorney General Michael Geraghty to EPA Region X Administrator Dennis McLerran, but EPA proceeded with the BBWA. Further, the area reviewed encompasses roughly 15 million acres and consists largely of State-owned lands. EPA's aggressive schedule undercuts the reliability of the assessment, when compared to the intensive, multi-year NEPA review schedules that are required to address specifically proposed projects.

The 2008 Mitigation Rule issued by the EPA and the Corps established stringent compensatory wetlands mitigation rules and procedures that the USACE must follow in administering CWA Section 404. Because of the preponderance of wetlands in the state, Alaska is disproportionately impacted by the 2008 Rule. Alaska gets no "credit" for the vast tracts of wetlands locked up in federal Conservation System Units and, because of the lack of disturbed wetlands in Alaska that could be restored to meet mitigation requirements, just about the only means for meeting mitigation requirements is the placement of conservation easements on lands that have potential for development.

Mr. WHITFIELD. And our next witness is a small-business man, still creating a lot of jobs in America, Mr. Clements.

You are recognized for 5 minutes.

STATEMENT OF THOMAS CLEMENTS

Mr. CLEMENTS. My name is Thomas Clements. I live in Lafayette, Louisiana, with my wife, Melissa. We are owners of Oilfield CNC Machining, LLC. It is a machine shop in Broussard, Louisiana. We have been married for over 7 ½ years and have three grown children and four grandchildren.

My wife and I really did build our business. We both agree that I wouldn't be here if the private sector wasn't doing fine. I would be home, working hard building our business. Maybe today with my testimony this committee can focus and help small-business owners, like my wife and I, to continue to build our business by opening all offshore and Federal land for energy production.

Energy prices are at an all-time record high in all sectors. This record-setting pace has to stop. The committee needs to understand that there is no such thing as bad energy. All natural energy is good.

For us, everything has changed. That is the first time I ever heard the President utter the word "moratorium." On May 27th, 2010, the President spoke of a moratorium that would last 6 months. That shocked us all. Two days later, I received an email stating that all our orders for the remainder of the year were cancelled. By the first week of June 2010, we were out of work, and everyone we knew in the industry was also out of work.

In October 2010, the President announced the moratorium was lifted. We were relieved, to say the least. We were eager to get back to work, but no orders came in. For us, no one has been accountable for their actions in the oil spill. BP said they would make it right, and the President pretended that a misguided moratorium was good.

What an outrage when the administration comes out with a 2012–2017 energy plan that does nothing for this country. The pace of permitting is slow—much slower than before the moratorium. Second, the 2012–2017 leasing plan fails—fails to offer access to any new areas offshore. This includes offshore Virginia, that now must wait until 2017 due to the administration's plan.

Their plan closes the majority of the Outer Continental Shelf to new energy production, only allowing lease sales in areas that were already open to drilling in the Gulf of Mexico and Alaska, but with delays in sales in the Beaufort and Chukchi Seas until 2016 and 2017.

Just look at what is happening in the private lands with shale oil and gas in the Bakken and Marcellus. In the Bakken and Marcellus, they are using technologies that didn't exist when old estimates were made. In 2008, after the impact of active exploration and development with technologies that enable hydraulic fracturing and directional drilling, estimates of recoverable oil in the Bakken jumped 25-fold, and estimates of natural gas supplies in the Marcellus have increased 42-fold, and liquids 343-fold. This sounds like energy security to me.

More resources mean more opportunity for people like me to help produce energy domestically. One study found that opening up offshore areas could create 1.2 million jobs and produce $70 billion in new wages. It isn't just that large companies will hire more people; small-business owners like me would have more work and would be able to employ more workers to produce more energy in America.

Owning our business and working to produce American-made energy in the oil field industry is our American Dream. We believe that the government role is to protect our country and encourage American workers to develop our natural resources. But instead, our government seems to be doing more to support foreign workers to develop energy sources abroad—Brazil, Mexico.

I am here today because our Nation needs energy, and thousands of energy workers like me are willing and able to help produce the energy right here at home. Mr. Chairman and members of this committee, please let us go back to work.

Let me close with this. How can you have a 5-year leasing plan with no economic data in the plan? And, by the way, the President's plan has not worked. I believe that we have thousands of years of natural good energy here in America. How will we ever know unless exploration is allowed in our country?

Thank you.

Mr. WHITFIELD. Thank you, Mr. Clements.

[The prepared statement of Mr. Clements follows:]

BEFORE THE COMMITTEE ON ENERGY AND COMMERCE

SUBCOMMITTEE ON ENERGY AND POWER

HEARING ON "THE AMERICAN ENERGY INITIATIVE: A FOCUS ON GROWING DIFFERENCES FOR ENERGY DEVELOPMENT ON FEDERAL VS. NON-FEDERAL LANDS"

AUGUST 2, 2012

TESTIMONY OF THOMAS CLEMENTS, OWNER OF OILFIELD CNC MACHINING

My name is Thomas Clements. I live in Lafayette, Louisiana, with my wife, Melissa. We are owners of Oilfield CNC Machining, LLC, a machine shop in Broussard, Louisiana. We have been married for over 7 ½ years and have three grown children and 4 grandchildren.

CNC stands for 'Computer pneumatic Controls." I have been a skilled CNC machinist for over 25 year, and for the past 25 years I've always worked long hours and, for the most part, lived paycheck to paycheck.

Neither my wife nor I were born with silver spoons in our mouths; both of us work long hours, and together we invested an enormous amount of sweat equity into finally becoming small business owners. My wife and I really did build our business, with no one else's help. We both agree that I wouldn't be here if the private sector was doing fine. I would be home working hard building our business.

Maybe today, with my testimony, this committee can focus and help small business owners, like my wife and I, to continue to build our business by opening all offshore and federal land for energy exploration.

Energy prices are at an all time record high in all sectors. This record setting pace has to stop. This committee needs to understand that there is no such thing as bad energy, all natural energy is good.

We took enormous risks, but we felt confident that as long as America has a demand for energy, we could make a living in the development of America's energy resources. So on December 3, 2008, we opened our doors for business.

Our first year, 2009, was a very successful year. We put all of our profits back into our business and caught up on all of our debts. We still couldn't afford to hire any help at that time, so I worked approximately 18-20 hour a day. I even slept on the couch in the shop most nights in order to keep the machine working around the clock.

But in April 2010, the BP oil spill happened, and 11 oil rig workers tragically lost their lives. We have the deepest sympathies for their families and loved ones. We know that they were hardworking people, just like us, and some bad decisions unnecessarily cut their lives short.

For us, everything changed. That's the first time I heard the President utter the word 'moratorium." On May 27, the President spoke of a moratorium that would last six months. That shocked us all. Two days later, I received an email stating that "All of our orders for the remainder of the year were cancelled." By the first week of June, we were out of work, and everyone we knew in the industry was also out of work.

At that time we had approximately $80,000 in the bank and $12,000 in expenses each month—monthly notes, insurance and utilities. We unwillingly had to lay off all of our employees and began making plans to stretch our income through the six-month moratorium. We went five months without a penny of income and no work orders.

In October 2010 the President announced that the moratorium was lifted. We were relieved, to say the least, and we were eager to get back to work.

But no orders came in.

For us, no one has been accountable for their actions in the oil spill. BP said they would make it right and the President pretended that a misguided moratorium was good.

What an outrage when the administration comes out with a 2012-2017 energy plan that does nothing for this country.

There are two challenges for us finding business with companies that are operating offshore. First, even though the moratorium after the Deepwater horizon has been lifted, the pace of permitting is still slow—much slower than before the moratorium. Second, the new 2012-2017 OCS Leasing Plan proposed by the administration fails to offer access to any new areas offshore, meaning that future business opportunities will be limited for us and countless businesses like ours. This includes offshore Virginia, an area that was scheduled to hold a lease sale in 2011, but must now wait until at least 2017 due to the administration's plan.

Their plan closes the majority of the outer continental shelf to new energy production, only allowing lease sales in areas that were already open to drilling in the Gulf of Mexico and Alaska, but with delays in sales in the Beaufort and Chukchi Seas until 2016 & 2017.

Currently, less than 3 percent of the outer continental shelf is leased for oil and gas exploration and development. Some say this isn't a big problem because, they claim, the Obama administration's 5 year plan allows for access to the production of more 75 percent of the nation's recoverable energy resource in the oceans. This claim is disingenuous as it relies upon decades old data in areas we have not assessed for decades because of a lack of access. If we used the same standard of claiming there was nothing there while actively choosing to remain blind to what exploration and development might tell us about the resources, we would have none of the tremendous economic benefits we see on non-federal lands in places like the Bakken and the Marcellus. We have only discovered how sizable the resource is there due to active exploration and production.

Just look at what is happening with shale oil and gas n the Bakken and the Marcellus. In the Bakken and Marcellus, they are using technologies that didn't exist with old estimates were made. This further

underscores that there very well may be considerably more available offshore that we ever though before.

In the Bakken there is much more oil that were estimated a few years ago. In 1995, the U.S. Geological Survey estimated that the Bakken formation held 151 million barrels of technically recoverable oil. But in 2008, after the impact of active exploration and development with technologies that enable hydraulic fracturing and direction drilling were included in the USGS's assessment, the estimate of recoverable oil in the Bakken jumped 25 fold. This sounds like energy security to me.

The same is true in the Marcellus shale. In 2002, the United States Geological Survey estimated the area held about two trillion cubic feet of natural gas and .01 billion barrels of natural gas liquids. By 2011, however, the USGS estimated the area held 84 trillion cubic feet of natural gas and 3.4 billion barrels of liquids. Within a span of 9 years, behind active exploration and development, as well as new technology, estimates of natural gas supplies in the Marcellus have increased 42-fold, and liquids 340-fold.

In contrast to plays like the Bakken and the Marcellus, the federal government holds the key to new offshore access. This is why the policy decisions the federal government makes are so critical. We cannot know whether there is a Bakken type resource off Virginia or anywhere else offshore without the ability for oil and natural gas exploration and production companies having the ability to go out and actively explore. More importantly, for small businesses like mine, new business opportunities in places like offshore Virginia are tied to these ill-conceived federal policy decisions.

I believe that the trickledown effect of jobs created from these explorations would ultimately free this country from a recession.

More resources mean more opportunity for people like me to help produce energy domestically. One study found that opening up the offshore areas could create 1.2 million jobs and produce $70 billion in new wages. It isn't just that large companies would hire more people, small business owners like me would have more work and would be able to employ more workers to produce more energy in America.

Owning our own business and working to produce American-made energy in the oilfield industry is our American Dream.

We believe that the government's role is to protect our country and encourage American workers to develop our natural resources. But instead, our government seems to be doing more to support foreign workers develop energy sources abroad.

I'm here today because our nation needs energy, and thousands of energy workers like me are willing and able to help produce that energy right here at home. Mr. Chairman and members of this committee, please let us go back to work.

By the way, the President's plan has not worked. I believe that we have thousands of years of natural good energy here in America. How will we ever know unless exploration is allowed in our country?

Thank you-

Mr. WHITFIELD. And, Ms. Sgamma, you are recognized for 5 minutes.

STATEMENT OF KATHLEEN SGAMMA

Ms. SGAMMA. Thank you, Mr. Chairman, Ranking Member Rush, and members of the committee. I am Kathleen Sgamma with the Western Energy Alliance. We represent 400 countries engaged in all aspects of environmentally responsible exploration and production of natural gas and oil in the West. Our alliance members are mostly small, independent companies and mainly small businesses.

Because of the huge proportion of public lands in the American West, my members are particularly affected by government policies that reduce access to energy that all Americans own on those public lands. Our Members are proud to produce 26 percent of the Nation's natural gas and 18 percent of the oil production, while disturbing less than a tenth of a percentage of all Federal acreage. So we provide that balance. And American producers operate under the most stringent environmental standards in the world, both self-imposed and those imposed on us as one of the most heavily regulated industries in the country.

Across America, my industry has been significantly increasing production of oil and natural gas over the last several years in spite of, not because of, the Federal Government. The huge increase in production is the result of private-sector investment in technology and improved techniques applied largely on private lands.

Where the government has the most control, on Federal lands, production is simply not keeping pace with the overall growth across the Nation. For example, in the West, natural gas production is down 4 percent since 2008 on Federal lands, while it is up 29 percent on State and private lands. And we have heard today from a number of folks that it is because these shale plays are all on private lands. Well, my number here compares apples to apples, in that we are looking at those same unconventional plays, a combination of shales and tight sands that we have in the West. So it is comparing the same types of reserves in the West.

If you look at the Bakken, because of the Bakken in North Dakota, oil production is up 54 percent in the West, but only 26 percent on Federal lands. So it is clearly not keeping pace on Federal lands. Nationwide, Federal oil production is down 1 percent.

So why this disparity on Federal lands compared to private lands? The reason is simple: The Federal Government policies make it extremely difficult to operate on public lands. There is virtually no certainty of overcoming the bureaucratic hurdles.

A Federal lease is really a "definite maybe." Maybe you will get through all the environmental analysis and regulatory burdens. Maybe you will get permission to drill. Maybe you won't be sued by an environmental group. And maybe you will find oil or natural gas. It is really a classic catch-22 situation, where the government has thrown up all these regulatory hurdles and then turns around and blames companies for not producing on their Federal leases, with the added Orwellian twist this year that now the Federal Government is claiming credit for that increased production.

Whereas on State and private lands production can be realized in a matter of months to a year or so, on Federal lands 3 years is the basic minimum. And we have seen projects stretching 5 to 10 years, and Reed Williams will tell us about a project that is now in the 16th year.

Policies include obstacles in the leasing process, new obstacles created since 2010; environmental analysis that is stretching over 7 years and preventing nearly 65,000 jobs a year and $15 billion in annual economic impact; ad hoc demands with no basis in regulation; and settling with environmental groups on litigation that stops economic growth and job creation.

On top of all those delays, BLM is undergoing rulemaking on hydraulic fracturing despite budget for it, manpower, and, more importantly, expertise. Besides being extremely costly and time-consuming, these new regulations will add a quarter of a million dollars onto the cost of every new well. And that just means less money for job creation, energy production, and economic activity.

The new requirements are redundant, with State regulations such as North Dakota—Mr. Helms doing a great job regulating—and will further drive up permitting times so that—Mr. Nedd couldn't answer the question today, but it is an average of 298 days. Secretary Salazar and BLM Director Abbey admitted to that on April 3rd, 2012. And if they add on this new BLM regulation, it is going to add another 100 days on top of that, I think minimum.

So, I have provided examples in my written testimony of other small businesses, like Mr. Clements' and Mr. Williams'. These regulations are stopping job creation and economic activity from small businesses. And I look forward to questions.

Thank you.

Mr. WHITFIELD. Thank you, Ms. Sgamma.

[The prepared statement of Ms. Sgamma follows:]

Kathleen Sgamma
Vice President of Government & Public Affairs
Western Energy Alliance

Before the
House Energy & Commerce Committee, Subcommittee on Energy & Power

The American Energy Initiative: A Focus on Growing Differences for Energy Development on Federal vs. Non-Federal Lands

August 2, 2012

Summary

- The oil and natural gas industry has significantly increased production of oil and natural gas over the last several years. The huge increases in production are the result of private sector investment in technology and improved techniques applied largely on private lands. 96% of the oil production growth since 2007 has been on private lands.
- Production has increased in spite of, not because of, the federal government. Where the government has the most control, on federal lands, production is simply not keeping pace with the growth overall across the nation.
- The reason for the disparity between federal and private/state lands is simple – federal government policies and additional bureaucracy make it extremely difficult to operate on public lands.
- Whereas on private and state lands production can be realized in a reasonable timeframe, on federal lands three years is a general minimum. Usually it is a matter of five to ten years, and we've seen delays stretching over fifteen years.
- Policies such as additional layers of leasing analysis; environmental analysis that's stretching five to seven years; average permitting times of 298 days; ad hoc demands with no basis in regulation; litigation from environmental groups; and inability to access leases.
- To exacerbate delays, BLM is adding an entire new and redundant hydraulic fracturing regulatory regime.
- Examples of delays preventing small businesses from producing oil and natural gas, creating jobs, stimulating the economy, and returning revenue to the American taxpayer are provided.

Chairman Whitfield, Ranking Member Rush, and Members of the Committee, thank you for the opportunity to appear before you today. Western Energy Alliance represents 400 companies engaged in all aspects of environmentally responsible exploration and production of oil and natural gas across the West. Alliance members are mainly small businesses and independent producers.

Because of the huge portion of public lands in the West, my members are particularly affected by government policies that reduce access to energy owned by all Americans on federal lands. Our members are proud to produce 26% of America's natural gas and 18% of its oil production while disturbing only 0.07% of public lands.

Production from the West supports 229,150 jobs, $51 billion in annual economic activity and $6 billion in taxes that benefit every single state and congressional district across the country. Our *Blueprint for Western Energy Prosperity* projects that my industry in the West will create 70,000 additional jobs and double investment by 2020 while significantly displacing foreign imports, but government policies threaten our ability to reach that full potential.

Across the country, my industry has significantly increased production of oil and natural gas over the last several years. U.S. production of oil has increased to the point that we're now importing only about 45% of our crude oil. Natural gas producers have increased technology to such an extent that we have over a hundred year supply and prices have been dramatically reduced. The huge increases in production are the result of private sector investment in

technology and improved techniques applied largely on private lands. 96% of the oil production growth since 2007 has been on private lands.[1]

My industry has increased production substantially in spite of, not because of, the federal government. Where the government has the most control, on federal lands, production is simply not keeping pace with the growth overall across the nation. In the West, natural gas production has declined 4% since 2008, whereas it's up 29% on private and state lands. Because of the Bakken in North Dakota, oil production is up 54% in the West on private lands, but only 26% on federal lands. Nationwide, federal oil production is down 1%.

Why this disparity between federal and private/state lands? The reason is simple – federal government policies make it extremely difficult to operate on public lands. Producers struggle to navigate additional bureaucratic barriers on federal lands, while many avoid federal lands at all costs because it's just too difficult to realize any return on investment within a reasonable time frame. It's hard enough to raise and deploy capital in tough economic times in the face of new federal regulation, but that problem is multiplied on federal lands. There is virtually no certainty on how long it will take to overcome the bureaucratic hurdles.

Let me provide some concrete examples of why development on federal lands is so difficult compared to state and private lands:

- Policy changes made in 2010 have added three layers of leasing analysis onto a system which already had five layers of analysis. As a result, BLM offered 81% less acreage in FY 2011 than in FY 2008.

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[1] *U.S. Crude Oil Production in Federal and Non-Federal Areas*, Marc Humphries, Congressional Research Service, March 20, 2012.

- One aspect of the 2010 policy changes was new the so-called Master Leasing Plan policy that requires redundant analysis in some areas prospective for oil and natural gas. These MLPs could put off limits an additional 300 million barrels of oil and condensate, and 10.5 trillion cubic feet of natural gas, on top of the huge energy resources that are already off limits.
- Environmental analyses under the National Environmental Policy Act (NEPA) regularly take the government five to eight years to complete, despite companies paying for the contractors to perform the analysis. Delays of three years or more are preventing 1,600 wells and the creation of 64,805 jobs, $4.3 billion in wages, and $14.9 billion in economic impact every year.
- It takes the government 298 days on average to approve permits, whereas corresponding state permits take about 30 days. Ad hoc demands for extra-regulatory surveys, studies, analyses, and other requirements which are added on at the field office level and can cause a permit to languish for years are not even counted in the 298 day average.
- Environmental groups regularly protest leases and permits, and sue to stop project approvals. Between FY2008 and FY2011, over 70% of leases offered in the Rockies were protested.
- Altogether, from lease until actual production, the process can take more than ten years, versus less than a year or two for private lands.

On top of all those delays, BLM is undergoing rule making regarding hydraulic fracturing despite lack of budget, expertise and manpower. Besides being extremely costly and time consuming, adding about $250,000 to the cost of each new well and inevitable increased permitting delays, the new requirements are redundant with state regulation and will further drive investment off public lands.

Examples where the burdensome process has stopped production:

- It took Stewart Petroleum, a sole proprietorship, nearly four years to get through the environmental analysis and legal challenges by environmental groups for a nine-well natural gas project in eastern Utah. After four years of being unable to realize any return on its $9 million investment, the company shifted to oil production on private lands in Kansas.
- Ewing Exploration, a six-person company, started an oil exploration project in the Bighorn Basin of Wyoming in 2005. Initial exploratory work determined that adjacent federal acreage was necessary to fully develop the resource. Continued delays by BLM in bringing leases to auction while it conducts additional analysis in the area has isolated Ewing's initial $3.5 million investment and prevented domestic oil resources from being developed.
- Impact Energy Services, a sole proprietorship, may suffer from bad luck, but it's bad luck imposed by a federal government breaking its commitments and obligations. Impact had leases in Utah withdrawn by Interior Secretary Salazar in one of his first acts upon taking over in 2009. In 2011, the Forest Service attempted to withdraw Impact's leases

in Wyoming purchased in 2006. While Western Energy Alliance was able to persuade the Forest Service to revoke that decision, bureaucratic inertia means that those leases continue to languish without production. This small business has suffered over half a million dollars in legal fees and lost business because of these ill-advised decisions.

- WillSource Enterprise is another small company that has been prevented from producing on its leases going on sixteen years now. Reed Williams will explain in depth, but his is a story of the one federal agency constantly requiring him to do additional environmental analyses and other ad hoc requirements, only to have another federal agency attempt to revoke some of his leases because he was failing to produce on them.
- Western Energy Alliance sued the Department of the Interior over its failure to issue leases to companies within sixty days of receipt of payment after auction, as required by law. All leases had been outstanding between two and five years. It's analogous to making a purchase on eBay, and then not receiving the goods for years. When ordered by a federal district judge in Wyoming to make a decision on these leases, Interior simply turned around and asked the companies for more time. When the companies refused, BLM simply denied the leases. We're appealing to the 10th Circuit Court, but these leases have now been held up an additional year and counting.

In all these cases, the general public loses out in terms of energy all Americans own and return to the American taxpayer. Small businesses, the engines of our economy, are prevented from creating jobs and economic growth.

Kathleen Sgamma
Western Energy Alliance

Mr. WHITFIELD. Mr. Williams, you are recognized for 5 minutes.

STATEMENT OF REED WILLIAMS

Mr. WILLIAMS. Chairman Whitfield and Ranking Member Rush and the rest of the committee members, thank you for allowing me to be here today to make this presentation. I think I am here because my specific small oil and gas company is embroiled in the middle of a vortex of many of these issues that we are talking about.

Back in 1996, a group of us leased some lands in the White River National Forest on the western slope of Colorado. Those lands fit right in the middle of a lot of existing oil and gas activity. There are more than 50 wells within a few miles of my exact leases, there are pipelines to those, and there even is a storage facility for natural gas contiguous with my leases. So it was a very well-established oil and gas area, and we were encouraged to go in and lease it. Things change across time, and we kept working with it and working with it. We believe in the reserves that exist there.

Over time, some of our offsetting competitors have drilled some deeper wells, and we believe that our little 8,000 acre position there will produce, oh, a tcf of gas. Even at $3 a unit, which hopefully will be greater than that, that is $3 billion worth of gross revenue, and just at 12 ½ percent royalty flowing just out of that off the top of it, it is over $350 million of revenue that would flow to the Federal Government as an asset of the government's, and then it gets shared back with the States, which would be great for the State of Colorado.

We have made an effort from day one to be an environmental steward, we assumed that that would be the only way we would be able to work on the White River National Forest, and I think you would find in the record that we have accomplished that one step at a time. We have invested as private investors, and our personal accounts. Mostly my company is owned by family members and myself, some friends of my family. We have invested over $10 million to date getting ready to produce that reserve off of that acreage. All along the way, if we have accomplished one set of regulations from the Forest Service or BLM or EPA, it seems like the next day a new one comes down that falls in our path to try to finish getting on to production and develop those reserves. As an example, and I think this is a clear, simple one to make: About a year and a half ago, there was a new onshore order issued that required, according to our friends at the Forest Service and the local ranger district there, which is a joint office between the BLM and the Forest, hopefully working close together, we were told there is a new rule about the construction and road design on the Forest road that we use to access our wells. That order came down and said now all of a sudden you have to stop doing what we told you to do, and you have to start doing what a civil engineer tells us we have to tell you to do, and they took away our use for that road to put drilling rigs on it to earn the leases that are in question all the time, and for a year and a half, we have been working with the contracted people to make sure that we get it done exactly by the new rules, and yet within the last few weeks, the Bureau of

Land Management has been pushed to consider taking away our leases for failure to perform.

Well, when you are in a situation where one agency's set of rules make it impossible for you to accomplish another agency's set of rules, we have got some kind of a trick going on or some kind of a problem, and we still believe in the project, we believe these assets are tremendously valuable, and I want to talk some more about the shales that we are talking about producing on State lands, they absolutely exist throughout the Rocky Mountain region on Federal lands. We just haven't yet been able to start developing them. We have proved it, we will bring it to the marketplace when we are allowed to, and it will be a tremendous economic help to our Federal budget. Thank you very much for the opportunity, and I look forward to answering your questions.

Mr. WHITFIELD. Thank you, Mr. Williams.

[The prepared statement of Mr. Williams follows:]

Reed Williams, President
WillSource Enterprise

Before the
House Energy & Commerce Committee, Subcommittee on Energy & Power

The American Energy Initiative: A Focus on Growing Differences for Energy Development on Federal vs. Non-Federal Lands

August 2, 2012

Summary

- WillSource is a small exploration and production company committed to environmentally responsible oil and natural gas development in its projects on public lands.
- WillSource's project in public lands on Colorado's Western Slope, which could generate $3 billion worth of natural gas production providing millions of dollars of government revenue to the American taxpayer while creating jobs and economic growth, has been delayed sixteen years, mostly from additional regulatory requirements imposed by the federal government.
- For example, the Forest Service has required WillSource to conduct multiple rounds of environmental analysis. WillSource also agreed to several measures to further reduce environmental impacts such as moving well pads and implementing new road maintenance procedures.
- Despite the fact that actions of the federal government have caused the project to be delayed so extensively, the Bureau of Land Management is attempting to revoke WillSource leases for failure to produce. This action appears to result from pressure from unaccountable environmental groups.
- In this case, new rules adopted by one governmental entity are making it impossible for a private company to fulfill another governmental entity's set of rules. This threatens the $10 million WillSource and its participants have invested in the project preventing WillSource from providing millions of dollars of revenue to the American government.
- A case like this exemplifies why oil and gas activity on Federal Lands is decreasing.

Chairman Whitfield, Ranking Member Rush and Members of the Committee, thank you for the opportunity to appear before you today. I am the President and Cofounder of WillSource Enterprise, a small three person oil and natural gas exploration and production company with operations on Colorado's Western Slope.

I've been producing oil and natural gas for twenty-five years; operating on public lands for more than sixteen years. Until recently, I've not experienced the delays and the obstructions I've started experiencing in my public lands project called Divide Creek Offset in Mesa County, Colorado. While public lands projects almost always take longer than comparable private and state projects, the delays I've seen in the last few years make me question for the first time whether I want to undertake new oil and gas business with the federal government. That's a strange thing to say since WillSource now believes the project could produce $3 billion worth of natural gas; generating significant job and economic growth. Especially since - almost every person working with WillSource in the Bureau of Land Management (BLM) and the Forest Service Colorado Offices has recognized WillSource's success as an environmental steward.

It all started in 1996 when associates acquired seven leases from the BLM on the surface of the White River National Forest. At the time, the forest was operated as a multi-use forest with many existing producing wells, several pipe lines servicing those wells, and a natural gas storage field offsetting my leases. It seemed a good operating environment for producing domestic energy while providing a significant return to the American taxpayer for energy owned by all Americans.

Over the years, WillSource and its private investors have invested approximately $10 million in the project which includes leasing fees (both bonuses and rental), geologic and geophysical interpretations, permitting fees, improvements to existing forest service roads, well pad construction, drilling of two wells, and construction of nearly 6 miles of stacked natural gas gathering lines installed in the existing road beds. WillSource has undertaken each step with the goal of meeting and surpassing every regulatory requirement.

An exploratory project on public lands can take many years to nurture until the first natural gas is produced and sold. WillSource committed to investing in these federal assets and understood the stringent regulatory requirements it was contracting to fulfill. But we could not begin to imagine the magnitude of new rules, changed regulations, and ad hoc requirements imposed on the project in the years since some of which significantly alter the terms of the original contract. WillSource has worked closely with the BLM, the Forest Service, the State of Colorado, the associated Counties, and many other stake holders. When WillSource acquired the acreage, an Environmental Impact Statement existed that should have enabled development to proceed. But, the Forest Service required us to complete a redundant Environmental Assessment (EA) and WillSource did it. That EA took almost two years to complete. Two wells were subsequently drilled. At that point, WillSource and the Forest Service agreed it would be in the best interest of the forest if WillSource could wait to hook up the two wells until a third party's planned pipeline was constructed rather than build a duplicate line. After waiting five years that line and processing facility are built and WillSource can finally hook into it and start selling gas. Except, the Forest Service is now requiring another EA be performed by WillSource.

The Forest Service asked WillSource to move an already approved well pad location to a new site to avoid steep drainage issues the Forest Service preferred be avoided. WillSource agreed and worked closely with both the Forest Rangers and BLM staff to pick a replacement site. Upon selection of a new site, WillSource was informed of new EA requirements including new forest road design and maintenance rules. Unbelievably, the Forest Service then informed WillSource its permit to use the road accessing our project was withdrawn until the new EA is completed totally denying WillSource's ability to fulfill the BLM's development requirements. We have been working with the Forest Service and BLM on the new EA for a year and a half at this point. We anticipate it will take another six months to complete costing over $100,000 of additional expense.

Recently, media made WillSource aware that a couple environmental groups are trying to pressure the BLM into taking away several WillSource leases because development time lines have been extended or need to be extended. The BLM has in fact informed WillSource that it is considering revoking three of WillSource's leases.

WillSource has sixteen years and $10 million dollars invested trying to develop the reserves below while doing the right thing on the surface. Now WillSource sits ready to start producing valuable American assets. If federal procedures actually make it impossible for WillSource to fulfill the various requirements of the different federal entities and WillSource loses its investment in this public lands project because of it, this case exemplifies why oil and gas activity on Federal Lands is deceasing.

Thank you for the opportunity to appear before you today. I look forward to answering questions.

Mr. WHITFIELD. Ms. Goldfuss, you are recognized for 5 minutes.

STATEMENT OF CHRISTY GOLDFUSS

Ms. GOLDFUSS. Chairman Whitfield, Ranking Member Rush, and members of the committee, thank you so much for inviting me today. It is a real honor to be here. My name is Christy Goldfuss. I am director of the Public Lands Project at the Center for American Progress Action Fund. We are a nonprofit organization that is dedicated to transforming Americans' lives by putting progressive value into policy.

I would like to make three major points in my testimony today about the current state of play between oil and gas drilling on public lands and private lands. First, simply put, there is a lot of production happening on public lands and waters; second, the oil and gas industry has access to an extensive inventory of leases and permits; and third, although there is tremendous oil and gas drilling happening on public lands, market factors have pushed the industry to be more interested in private lands, and there is a demand problem, not a supply problem.

Before I go a little deeper into each of those points, let me start where most of us agree, oil and gas development is an appropriate use of our Federal lands. It is essential for our national security to reduce our dependence on foreign sources of oil, and we are making significant strides in that direction, but we should also agree that these lands, owned by all Americans, are inherently different than private lands. In many cases, by law, the land management agencies are required to manage for multiple uses, and that includes hunting, fishing, grazing, hiking, recreation, and not just energy production.

In other words, an all-of-the-above energy strategy does not mean an all-of-the-acres strategy or oil above all. If managed wisely, our public lands and waters can serve multiple national purposes. Among them, addressing our current energy needs, ensuring clean air and water for our Nation, providing places for hunting and recreation, and protecting American treasures for future generations.

When it comes to this first challenge on the list, addressing our current energy needs, America's public lands and waters are doing their fair share. As President Barack Obama said last March, we are drilling all over the place, and here is a major point: Oil production from the Federal lands and waters in fiscal year 2011 was higher than in the last 3 years of the Bush administration. There has been a 12 percent increase in production since 2008, and the Bureau of Land Management held three of the top five largest lease sales in the agency's history in calendar year 2011. With this level of activity on public lands, it is clear why The New York Times said in their recent article about oil and gas drilling on public lands, the scorecard shows that the industry is winning.

All of these efforts have come while the industry still holds extensive inventory of idle leases. The DOI found that 56 percent of the leased acres in the lower 48 States and 72 percent of the leased acres offshore are not in production or exploration. Simply put, the industry currently holds the keys to vast amounts of publicly

owned resources and has decided not to develop them at this time. And there are many reasons for that, some of which include the current price of natural gas and the location of the best quality resources, which are predominantly on private lands. We even have companies right now shedding in their wells because they need to increase the price of natural gas to make it economic for them to continue to develop.

The extensive natural gas boom does not have everyone happy, and early in July, I had the opportunity to see for myself why. I traveled to northeast Utah to one of the most beautiful places in this country, Desolation Canyon. After driving through miles of pump jacks on public lands, I felt like I was in more of an oil and gas city, rather than a gateway to a natural wonder, and as the pumps finally faded in the distance, I realized we were driving through the future site of 1300 new oil and gas wells, just approved by the Obama administration, which rejected calls from environmentalists to choose smaller alternatives.

I find myself asking, will the receiving line of pump jacks impact people's desire to travel to this place to escape it all? Could the extensive drilling damage the Green River and the amazing wildlife that people want to see? Just up the road from that spot in Vernal, Utah, population 9,000, they have experienced ozone levels that rival those of Los Angeles because of the increased drilling, much of it on public lands.

We know that sportsmen in Wyoming say that similar environmental conditions have a negative impact on antelope and mule deer there, which means less hunting, and that is bad news for the outdoor industry, which just released a new report showing that it creates 6.1 million American jobs nationwide, 20 percent of those in manufacturing, and that is about 3-to-1 the number of jobs created by the oil and gas industry.

The very idea that oil and gas drilling on public lands should track with development on private lands implies that oil and gas development is the single most important use of these lands. If we were to take that myopic approach to managing an asset that belongs to all Americans, we endanger the other uses. Instead, we need to insert balance into any development scenario, such as analyzing loss to hunting and fishing habitat when proposing new acres to be leased for oil and gas.

As President Teddy Roosevelt said, America's great natural resources must be used for the benefit of all our people and not monopolized for the benefit of the few. Thank you so much for inviting me today, and I look forward to questions.

Mr. WHITFIELD. Thank you very much.

[The prepared statement of Ms. Goldfuss follows:]

Center for American Progress Action Fund

Testimony before the House Energy and Commerce Committee, Subcommittee on Energy and Power

"The American Energy Initiative: A Focus on Growing Differences for Energy Development on Federal vs. Non-Federal Lands"

Christy Goldfuss
Director of the Public Lands Project, Center for American Progress Action Fund
August 2, 2012

Chairman Whitfield, Ranking Member Rush, and members of the committee, thank you very much for the opportunity to testify today. It's a real honor.

I am Christy Goldfuss, Director of the Public Lands Project at the Center for American Progress Action Fund, a nonprofit organization dedicated to improving the lives of Americans by transforming progressive values and ideas into policy. We develop and support land management practices for our 700 million acres of taxpayer-owned land that result in sustainable development of our natural resources while conserving lands to support clean air, clean water, and our American heritage.

Let's start where most of us agree—oil and gas development is an appropriate use of our federal lands. It's essential for our national security to reduce our dependence on foreign sources of oil, and we are making significant strides in that direction. For the first time in 14 years, the United States imported only 45 percent of the nation's oil, due in great part to the extensive tight oil production in North Dakota and Texas.

But we should also agree that the public lands owned by all Americans are for multiple uses, including hunting, fishing, grazing, hiking, and recreation, and not just energy production. The Federal Land Policy and Management Act specifically defines the term "multiple use" as:

> ... the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people ... with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output.

A progressive approach to land management recognizes that land conservation is an essential element of the multiple-use mandate, and such lands are an important part of any comprehensive energy portfolio. In other words, an "all of the above" energy strategy does not mean an "all of the acres" or "oil above all" strategy. The vast public estate in its natural form is essential to offset the pressures of our expanding population. The national forests are natural filters for clean water and absorb some carbon pollution. The wide-open spaces of wilderness on Bureau of Land Management lands help support habitat for hunting and fishing. And the national parks are a fundamental element of our American heritage.

Beyond the importance of conserving lands for the health of our society, they also support an outdoor recreation industry that directly employs three times more workers than the oil and gas industries. These jobs are in many economic sectors like manufacturing, transportation, and retail. That's $646 billion in outdoor recreation spending each year with $39.7 billion in state and local tax revenue.

If managed wisely, our public lands and waters can serve multiple national purposes, among them:

- Addressing our current energy needs
- Ensuring clean air and water for our nation
- Providing places for hunting and outdoor recreation
- Protecting American treasures for future generations

When it comes to the first challenge on the list—addressing our current energy needs—there are already significant amounts of fossil fuels produced from federal lands and waters. In March the U.S. Energy Information Administration, or EIA, released a report that showed approximately 30 percent of the oil, 20 percent of the natural gas, and 45 percent of the coal produced in the United States comes from public lands and waters.

As President Barack Obama said last March, "we are drilling all over the place." Oil production from federal lands and waters is higher than in 2008, 2007, or 2006. The EIA determined that in 2011 the United States produced 646 million barrels of crude oil from federal lands and waters compared to 575 million barrels in 2008—a 12 percent increase in production. And oil production from federal areas was higher every year from 2009 to 2011 than from 2006 to 2008.

Regarding new lands offered for oil and gas development, the Bureau of Land Management held three of the top five largest sales in the agency's history in calendar year 2011, and this year, it has approved controversial projects to drill in the Arctic Ocean and close to

wilderness areas near Desolation Canyon, Utah. With this level of oil and gas activity on public lands, it is clear why a recent *New York Times* article about oil and gas production on public lands said, "The score card shows that the industry is winning."

In addition, data from the first year of this administration's oil and gas reforms show more signs of good news for the oil and gas industry. These reforms were established after a court formally blocked the Bureau of Land Management from issuing 77 leases sold at the end of the Bush administration. The changes were designed to make oil and gas leasing on public lands more efficient and transparent. Plus, the new rules provide the Bureau of Land Management with the opportunity to consider other uses of the land in order to identify the best areas for oil and gas development.

These reforms were not officially in place until the start of 2011, but initial data reveal some encouraging trends. In the report "Making the Grade (Almost)," The Wilderness Society analyzed government data for calendar year 2011 and the first quarter of 2012, and it appears that there has been a dramatic reduction in litigation against oil and gas leases in most places.

Prior to the reforms, from 2007 to 2009, 83 percent of leases offered in the intermountain West were challenged. At that time, there was little opportunity for the public to participate in the process without litigation. For 2011, however, the only full year that the reforms have been in place, 25 percent of the leases offered were protested in the intermountain West. That's nearly a two-thirds reduction in protests in the first year, and data from the first quarter of 2012 show a continuation in that trend.

Other efforts to increase certainty for oil and gas producers by reducing the length of permitting reviews have had some success. According to a May report released by the Department of the Interior, the backlog of applications for permits to drill, or APDs, has been reduced by 24 percent since 2008. Plus, the department recently announced a new "automated tracking system" that it hopes will reduce the time to review and issue a lease by two-thirds. In normal circumstances this should allow operators to receive permits in 60 days or less.

These efforts to improve the process for the oil and gas industry have continued, despite the fact that the industry has an extensive inventory of leases that it is not developing. Onshore, the Department of the Interior found that 56 percent of the leased acres in the lower 48 states are not in production or exploration. The percentage is even larger offshore, where 72 percent of leased acres are not in production or exploration.

This simply means that the industry currently holds the keys to vast amounts of publicly owned resources but has chosen not to move forward at this time with development. As of the end of fiscal year 2011, there were more than 38 million onshore acres under lease, but the industry was only actively producing on just more than 12 million acres. The story holds true down the line, given that as of the end of fiscal year 2011, the industry was holding more than 7,000 authorized permits to drill with parcels that were unexplored or undeveloped.

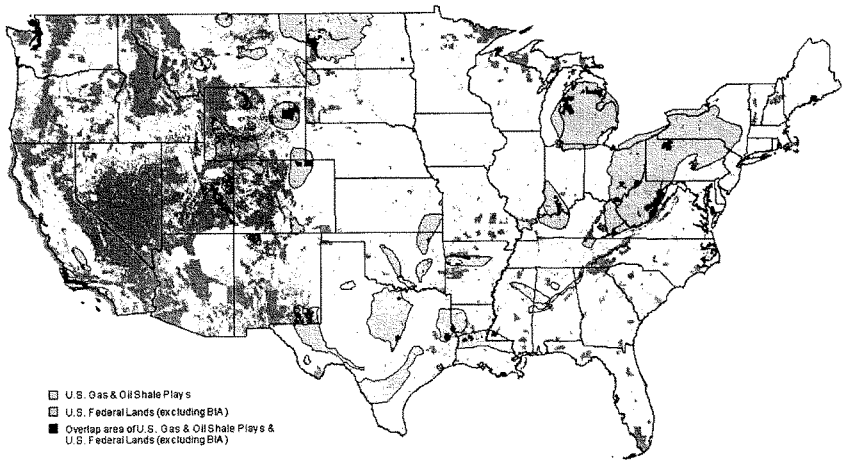
In addition to the idle leases, there have been several indications that the industry is less interested in the actual resources available on public lands and waters. As the EIA put it:

> The rapid increase in natural gas production from shale resources over the last 5 years has significantly affected natural gas prices and the relative attractiveness of Federal and Indian lands as areas for development of conventional natural gas resources.

As the price of natural gas dropped, there was a dramatic decline in the amount of public land nominated by the industry for leasing. Since fiscal year 2006 (during the Bush administration), there has been nearly a 67 percent decline in the amount of public land nominated by the industry in the Rocky Mountain States. As one industry expert told *The Wall Street Journal*, "It is safe to say that there will be fewer natural gas wells drilled in 2012." Given the current low price of natural gas, there is simply less demand from industry to drill at all, let alone on public lands.

In addition, the oil and gas industry has been less focused on public lands and waters, since many of the best resources are currently located on private land, as can be seen in the map below. The growing tight oil production in the Bakken play of North Dakota is a prime example. Plus, shorter time limits and higher rental rates on private lands have also motivated the industry to develop those leases first. The oil and gas industry drills where the best resources are and the best resources have recently been on private lands.

Lower 48 Oil and Gas Shale Plays and Federal Lands



Source: EIA

These conditions have driven much of the development on private lands, but the federal government has kept pace. As the Congressional Research Service reported, "About 96% of the increase since 2007 took place on non-federal lands, but the federal share of total U.S. production only fell by about 2 percentage points." In short, there is currently a lot of oil and gas drilling on public lands, and the industry has the access to do more drilling if it decides that it works for its bottom line.

The recent natural gas boom has been accompanied by growing concerns about the health and environmental impacts of extensive drilling. Vernal, Utah, population 9,000, recently began to experience ozone levels that rival those of Los Angeles because of the increased drilling in the area—much of it on public lands. Sportsmen in Wyoming have organized to

stop a drilling project in the Noble Basin of the Bridger-Teton National Forest because they are concerned about the impacts the drilling will have on wildlife in the region, such as antelope and mule deer.

This raises a fundamental question about how to balance oil and gas development with the other uses of these places that belong to all Americans. Such an approach to public lands management requires that we recognize that their "multiple uses" have economic value beyond their ability to put people to work for the oil and gas industry. A Colorado College State of the Rockies poll released earlier this year, for example, shows that 91 percent of voters surveyed in six western states see protected public lands, such as wilderness areas and national parks, as "essential" to their states' economies.

Earlier this summer, the Outdoor Industry Association released a report in conjunction with the Western Governors' Association that reveals the overall economic impact of the outdoor industry. This diverse industry is larger than the pharmaceutical, household utility, and gasoline and other fuel industries, creating 6.1 million American jobs nationwide. The outdoor industry is responsible for $646 billion in direct spending, $39.9 billion in federal tax revenue, and $39.7 billion in state and local tax revenue.

The report goes on to say:

> Supporting the outdoor recreation economy are our nation's public recreation lands and waters. Not only is access to quality places to play outside critical to our businesses, it is fundamental to recruiting employers and at the heart of healthy and productive communities. Open spaces and

recreation areas are magnets that draw after-work activity and tourists alike.

In fact, the nonpartisan firm Headwaters Economics found that non-metro western counties with more than 30 percent of their land under federal protection increased jobs at a rate four times faster than non-metro counties with no federally protected lands.

America's protected public lands are big business, and they deserve as much attention as the other uses of the vast public estate.

The very idea that oil and gas drilling on public lands should track with development on private lands ignores the multiple-use mandate bestowed upon the public lands agencies and instead implies that oil and gas development is the single-most-important use of these lands. If we were to take this myopic approach to managing an asset that belongs to all Americans, we would endanger these other uses.

The negative impact on the other uses would come at great expense to the American public with very little return. Experts agree that more drilling has *no impact* on the price at the gasoline pump. The *Associated Press* analyzed 36 years of monthly domestic oil production and gasoline price data and found "no statistical correlation" between domestic oil production and gas prices. Even analysts from conservative think tanks agree with this point, such as Ken Green of the American Enterprise Institute who said that, "If the U.S. produced more of its own oil, it would probably reduce imports, but it's not likely that it would reduce prices."

The relationship between a corporation and a private landowner is inherently different than that of the federal government and a corporation, and most would agree that it should stay that way. A private landowner only has his or her own interests in mind, not those of hunters, anglers, mountain bikers, hikers, or future generations. It is a remarkably challenging job given to those in the land management agencies to manage so many different interests. But it is essential for our country and our society as well as compliance with the law that they strive for balance, which means that oil and gas cannot stand above the rest.

The flip side of that coin is that conservation should be considered as part of any development scenario. This could mean analyzing the loss of hunting and fishing habitat when proposing new acres to be leased for oil and gas production, or an economic analysis of how developing a certain area would impact the recreation industry. Such a progressive approach to this unparalleled American asset ensures that it continues to pay off for decades to come.

A balanced approach to managing the public lands and waters that belong to all Americans is necessary for our health and enjoyment. Oil and gas development can be an appropriate use of some of these lands, but it must not come at the expense of hunting, fishing, recreation, and an overall healthy environment. As President Theodore Roosevelt said, America's great natural resources "must be used for the benefit of all our people, not monopolized for the benefit of the few."

Mr. WHITFIELD. Mr. Fisher, you are recognized for 5 minutes.

STATEMENT OF COREY FISHER

Mr. FISHER. Mr. Chairman, members of the subcommittee, thank you for the opportunity to testify today. My name is Corey Fisher, and I am the assistant energy director for Trout Unlimited, a national nonprofit conservation organization with 140,000 members and a mission to conserve, protect, and restore North America's cold water fisheries and their watersheds. I am also here today on behalf of Sportsmen for Responsible Energy Development, a coalition of nearly 500 organizations and businesses. The organizations that I represent support responsible energy development. We work with numerous stakeholders, including agencies, industry, and other sportsmen's organizations to find ways that energy development can move forward in ways that conserve wildlife and our hunting and fishing heritage.

I would like to emphasize that Federal public lands are of great importance to hunting, fishing, and the economy. In my home State of Montana, 75 percent of hunters, myself included, hunt on public lands, and in 2010 more than 229 million people visited Forest Service and BLM lands, with an economic impact of $21.9 billion. Because public lands are managed for multiple uses, not only do they provide benefits for sportsmen and the economy, but they also allow opportunities for energy development and numerous other uses. This isn't always the case for private lands and State lands, however. In some cases, they are not managed primarily for energy development. However, the vast majority of public lands require a balance where no one use is allowed to trump another.

Due to the multiple stakeholders on public land, early collaboration and input from diverse interests is essential to ensure sound, balanced decisions. This early coordination is a key component of the Interior Department's 2010 leasing reforms.

Here is a personal example of the reforms at work. Every year I camp along Cottonwood Creek, a stream in central Montana. Cottonwood Creek has been restored with a population of cutthroat trout. It was also proposed last year for a lease by the BLM. So when I saw that, I took notice. Working with the new leasing reforms, Trout Unlimited was able to comment on the environmental assessment before the lease sale, draw attention to the trout restoration efforts. The result was that the BLM applied appropriate stipulations and was able to offer the lease for sale without any objection from Trout Unlimited. This is just one example where we have found the BLM to constructively seek input from stakeholders, allowing them to sell leases while conserving habitat and preventing future conflicts.

I believe that smart planning will also prevent negative impacts to fish and wildlife, impacts that can be difficult or impossible to fix. For example, in the Pinedale Anticline in western Wyoming, studies have shown that the sublette mule deer herd has decreased by 60 percent, and it is no coincidence that the winter range that these deer depend on to survive has been extensively developed for oil and natural gas. This population decline has resulted in a shorter hunting season and a 44 percent decrease in the number of

hunters who are allowed to hunt that deer herd. This loss in hunting opportunities raises an important point. As valuable as winter range is for mule deer and clean streams are for trout, this issue cuts much deeper. It is personal for hunters and anglers in the West. Public lands are the places where family and friends make memories on crisp fall mornings spent hunting and where we go to spend our summers fishing. They are the places where we shot our first deer and landed our first trout, and it is these places and experiences that we hope to be able to pass on to future generations of hunters and anglers.

For us, this is really the core of the issue. These are not just places on maps, these are places in our hearts, and that is an important reason why sportsmen and women have a stake in land use decisions. I believe that collaborating with hunters, anglers, and other stakeholders is not undue regulation, it is just good policy. We are not proponents of excess regulation, but we are proponents of collaboration and seeking early input. Like energy companies and developers, we deserve a say and a fair shake, and that is what these leasing reforms and front-end collaboration have given us.

In closing, public lands are vitally important to hunters and anglers and our way of life. We also recognize the importance of energy development on those lands. Through transparency and opportunities for public input, we can both develop energy resources and ensure that our public lands remain a great place to hunt and fish. Thank you for the opportunity to share my thoughts, and I would be happy to answer any questions.

Mr. WHITFIELD. Thank you, Mr. Fisher.

[The prepared statement of Mr. Fisher follows:]

Statement of Corey Fisher, Assistant Energy Director, Trout Unlimited

One Page Summary

Thank you for the opportunity to testify before the House Energy and Commerce Committee's Subcommittee on Energy and Power. The hearing is on "The American Energy Initiative" and the focus is on "the growing differences for energy resources for energy development on Federal vs. non-federal lands".

My name is Corey Fisher; I am the Assistant Energy Director for Trout Unlimited (TU), a national non-profit conservation organization with a mission to conserve, protect and restore North America's coldwater fisheries and their watersheds. I am also here on behalf of Sportsmen for Responsible Energy Development, a coalition of nearly 500 organizations and companies working to find a balance between energy development and fish and wildlife conservation.

Unlike state and private lands, federal lands require a balance of multiple uses - including energy development and conservation. The differences in energy development on federal public lands from state lands or private lands are in large part because they are managed for different outcomes.

The federal public lands are of great importance to hunting and fishing in the U.S. FY 2010 saw more than 58 million visitors to BLM lands with a resulting benefit of $7.4 billion to the economy. Moreover, public lands are the place sportsmen hunt throughout the West.

Federal land managers have not always struck a balance between energy development and other multiple uses. For example, studies have documented the impacts from energy development to mule deer and antelope. Additionally, pollution spills and stormwater runoff associated with development threatens watersheds with important trout fisheries.

The impacts cited above are avoidable through improved up-front analysis, larger scale analysis and early public engagement that can lead to better management decisions and can help prevent future conflicts.

In closing, public lands are vitally important to sportsmen and our way of life, but we also recognize the importance of energy development on public lands. Through transparency and opportunities for the public input, we can develop energy resources and ensure that our public lands remain a great place to hunt and fish.

Statement of Corey Fisher, Assistant Energy Director, Trout Unlimited

U. S. House of Representatives, Committee on Energy and Commerce,

Subcommittee on Energy and Power

Hearing on "The American Energy Initiative"

August 2, 2012

Mr. Chairman and Subcommittee members:

Thank you for the opportunity to testify before the House Energy and Commerce Committee's Subcommittee on Energy and Power. The hearing is on "The American Energy Initiative" and the focus is on "the growing differences for energy resources for energy development on Federal vs. non-federal lands".

My name is Corey Fisher; I am the Assistant Energy Director for Trout Unlimited (TU), a national non-profit conservation organization with more than 140,000 volunteers organized into about 400 chapters from Maine to Alaska. Our mission is to conserve, protect and restore North America's coldwater fisheries and their watersheds. TU chapters invest thousands of volunteer hours on their local streams and rivers to restore habitat for trout and salmon fisheries, and they invest considerable time in conducting youth conservation camps and taking kids fishing.

TU works with partners to fulfill our mission. TU staff and volunteers work with state and federal agencies to clean up pollution from abandoned mines, work with farmers and ranchers

to improve riparian habitat and restore stream channels, and work with western irrigators to improve water management and restore stream flows. TU also works with sportsmen who care about protecting great hunting and fishing places on public lands.

In short, we work to ensure a bright future for hunting and fishing in America.

I am also here on behalf of Sportsmen for Responsible Energy Development, a coalition of nearly 500 organizations and companies led by TU, the National Wildlife Federation and the Theodore Roosevelt Conservation Partnership. We are working with the energy industry, local communities and federal agencies to find a balance that provides for production of energy resources while ensuring the protection of key fish and wildlife habitats on public lands. Achieving a balance between energy production and habitat conservation is essential for sustaining quality hunting and angling opportunities and the $76 billion in economic activity attributable annually to hunting and angling in the U.S.

In my home area of Missoula, Montana, it has been a memorable fishing season and we are beginning to look forward to another fall hunting season. As we sight in our rifles and stock up on supplies, many western communities once again will benefit from the outstanding economic benefits that hunting and fishing bring.

As a sportsman and a resource professional in the conservation field with years of experience working with the federal land management agencies to balance energy development with hunting, fishing and conservation, I am pleased to provide my thoughts on

these important issues related to the development of energy on our public lands. I firmly believe that responsible energy production that balances the needs of fish and wildlife habitats and water resources is achievable and is an important component of a sound economy.

Federal lands are managed to balance multiple uses; state, and private lands generally are not.

I would like to start with a little history and a few facts. As the Subcommittee considers "the growing differences for energy resources for energy development on Federal vs. non-federal lands", members need to remember that federal lands are managed for multiple uses -energy, fish and wildlife, timber and grazing, and others— whereas state and private lands generally are not. This guiding multiple use principle for the BLM and National Forest lands has been through decades of development and refinement, a number of energy crises, and economic ups and downs. It means that one type of use, such as energy development, has to be balanced with the needs of other uses. One type of use, cannot, by law, and should not, in our view, be allowed by the agencies to dominate to the detriment of others.

State lands are not always managed under the same multiple-use requirements, and for instance, in my home state of Montana we have a constitutional mandate requiring the Montana Department of Natural Resource Conservation to maximize revenues from commodities, not maximize fish and wildlife habitat. And of course on private lands, landowners choose how to manage their lands and are not required by any government to manage for multiple uses. In short, the differences in energy development on federal public lands from state lands or private lands is in large part because they are managed for different outcomes.

Thanks to their multiple-use management requirements, federal lands can produce energy while also sustaining outstanding hunting and fishing.

Public lands are vitally important to hunters and anglers.

The federal public lands are of great importance to hunting and fishing in the U.S. because of the important fish and wildlife resources they harbor. FY 2010 saw more than 58 million visitors to BLM lands with a resulting benefit of $7.4 billion to the economy. Most of these visits were to enjoy scenery, hunt, fish, camp, watch wildlife or have other great outdoor experiences. Americans and people from all over the world come year after year to experience our public lands, and they bring the economic benefits with them. This sustainable economic engine is dependent on healthy environments, clean air, clean water and abundant fish and wildlife. In 2010 in Wyoming, Colorado and Utah, more than 2.2 million hunters and anglers bought licenses, providing license revenues of more than $1.2 billion back to those states. Nationwide it is estimated that 1.2 million jobs are provided annually by the outdoor industry, many hunting and fishing related.

According to the U.S. Fish & Wildlife Service, in Montana, over 75 percent of all hunters statewide - including myself - hunt on public lands. In a society where we are seeing a decline in hunters and anglers, we need more, not fewer quality hunting and fishing opportunities or we will continue to see our sporting heritage erode, along with the associated economic benefits. Sportsmen in Montana, and throughout the West, rely on public lands to fill their freezers, make memories and pass on our traditions to our sons and daughters.

Where we have failed to balance uses, hunting and fishing has suffered.

Federal land managers have not always succeeded in striking a balance between energy development and other multiple uses. For example, mule deer populations have been declining across much of the West. Mule deer experts agree that one of the limiting factors for mule deer is available winter habitat. Much of the winter habitat being developed by energy activities, including roads and well pads, are identified by state wildlife management agencies as "crucial" for survival. A recent report evaluating the decline of mule deer in the Green River basin in Southwestern Wyoming and Northwestern Colorado revealed that 2.4 million acres of the 10.2 million acres of mule deer crucial winter range has been leased for development.

In the Pinedale Anticline gas field, a 60% population decline in the Sublette mule deer herd unit happened with less than 3% surface disturbance (Sawyer, WEST Inc. 2010). According to the Wyoming Game and Fish Department, statewide mule deer harvest in 2011 was the lowest in a decade, and much of this may be attributable to loss of habitat from development along with drought and tough winter conditions. Permits for hunting licenses have had to decrease to accommodate such losses—in south-central Wyoming (an area with significant oil and gas development) a decrease in the population of the Bitter Creek Pronghorn herd unit has resulted in the Wyoming Game and Fish Department issuing just over 200 license in 2011, down from a high in the 1990s of more than 3,700 licenses. Energy development is thought to be the main cause, though drought, fencing, and feral horse impacts may also contribute to their decline. All of this underscores the need for up-front analysis

before leases are offered for sale, so that input from stakeholders informs the BLM's decisions and the cumulative problems facing these big game herds are not exacerbated.

Pollution from energy development on public lands—including spills and stormwater runoff from roads and well pads—threatens watersheds with important trout fisheries. For example, energy development on the Roan plateau now threatens some of Colorado's best remaining Colorado River cutthroat trout fisheries, and TU and other conservationists have taken successful legal action to compel the BLM to do a better job of assessing fisheries values in its development decision.

We need to do energy development right on public lands so that we don't lose the great hunting and fishing available there.

The impacts cited above are avoidable, and improved up-front analysis of areas to be leased as well as ample opportunity for public involvement can lead to better management decisions.

In 2010, Secretary Salazar announced a set of leasing reforms designed to better engage the public and balance development with the protection of key natural resources. These reforms included an improved review prior to leasing so that decisions are made based on current information, and enhanced public participation. Early engagement of the public, larger scale planning, and identifying key habitat areas early in the process are all common sense steps included in the leasing reforms. Master Leasing Plans, for example, could provide a new and powerful opportunity to avoid and minimize wildlife-related and other environmental impacts.

One example of leasing reforms reducing conflict is from a place that I camp every year on the Beartooth Game Range in near

Helena, Montana. The BLM had proposed a lease along a stream that had been restored with cutthroat trout, but they were not aware of the project. After receiving our comments, the BLM revised the lease to account for this oversight and went ahead and offered it for sale. Previously, we would have had to protest this lease, but with the pre-leasing review we were able to help the BLM make an informed decision and offer a lease unencumbered with a protest. For TU, that is what these reforms are all about - making informed decisions on the front end in order to prevent conflicts later on.

Just as industry needs certainty that they will be able to develop their leases, sportsmen need certainty that our public lands will remain a great place to hunt and fish. The bottom line is that the reforms help to ensure that the BLM is able to make informed decisions about the leases they offer, and do their best to balance diverse uses. It is not a perfect process and not everyone is always happy, but in our experience the process in place now is a far better than what was previously in place. Unfortunately, the U.S. House of Representatives recently voted to undo the leasing reforms as part of broader energy legislation (H.R. 4480) aimed at expanding production. The more likely result of overturning the leasing reforms would be greater conflict and more lease protests.

Not only do leasing reforms help lead to better management decisions, if implemented well they will reduce conflicts.

We believe that the leasing reforms are resulting in less conflict, better conservation and—as our experience in Montana illustrates—more certainty for the industry. These improvements are largely attributable to the opportunity to consult on the front end of the leasing process, before it becomes contentious.

In the past, damage to important fish and wildlife resources resulted in sportsmen and other conservation groups increasing the amount of formal protests of energy projects. Between fiscal year 1998 and fiscal year 2009, the percentage of oil and gas leases protested jumped from one percent to nearly 50 percent. In some states, nearly all lease sales were protested. Now lease protests are declining. In 2011 protests were down to 35 percent, and in particular the protests by sportsmen groups declined to a trickle during a period that lease sale revenues were increasing.

Prior to the reforms, the only way that TU or other conservationists could officially consult with the BLM was to file a protest. And we don't like filing protests - it's a time consuming and a diversion of resources for us just like everyone else. Now with the pre-leasing review, we are able to share information and present our perspective before a lease is offered for sale, and in most cases our concerns are addressed and we don't need to file protests. Since the reforms were implemented, we have only had to file two protests, far less than the 26 protests we filed prior to leasing reforms.

Involving stakeholders in energy decisions on the public lands in an early and meaningful way is the key to success in striking the right balance of uses on the public lands. Involving the public in the decision process clearly adds complexity and is often frustrating, but when done well, it results in better and more lasting decisions. Nobody, including TU, likes unnecessary regulation, but with so many diverse interests who have a stake in how their public lands are managed, everyone deserves a say and a fair shake.

Balancing multiple uses on the federal lands is a very tough job. It is not easy to do it well and it seems that at times all parties are at odds with the BLM. We recognize that leasing and permitting procedures and processes sometimes take longer than they should. But we do not feel that sustaining great hunting and fishing and developing energy on public lands are mutually exclusive outcomes, or that the measures in place to help balance multiple uses are unduly preventing development. The fact remains that the energy industry has access to a large amount of public land, has developed oil and gas with great success, and will continue to do so. Currently, 38 million acres of leases are held by industry. Less than half of the available acreage is in production. Industry currently holds more than 7,000 approved unused permits to drill for oil and gas public lands.

Conclusion

Due to the extraordinary fish and wildlife values on public lands and the agencies' multiple use mandates, it is important to have the right protections for fish and wildlife habitat in place. TU is committed to working constructively with the industry, the public land management agencies, the states and local counties and communities, to enable energy development to move forward in the right places, in a way that provides certainty for both industry and the future of hunting and fishing.

In closing, sportsmen and women recognize the importance of energy development on public lands. We also believe in transparency and opportunities for the public to be meaningfully involved in decision that affect the places we hunt and fish. The oil and gas leasing process needs to provide an opportunity

to identify areas of important fish, wildlife and sportsmen early on. Ideally with this early identification we can design projects that provide for the development of energy from public lands and develop safeguards to ensure that fish and wildlife population remain abundant now and for future generations or sportsmen. Hunting and fishing are a part of our American heritage, a part of our way of life, and an important part of our economy. If managed appropriately for multiple uses, we can develop energy resources and ensure that our public lands remain a great place to hunt and fish.

Thank you for the opportunity to testify.

Mr. WHITFIELD. Thank all of you for your statements. We have two votes on the House floor. There is like 4 minutes left in the first vote, and then there will be a second vote. So rather than rush, what I am going to do, I am going to adjourn this hearing. We intend to be back here at 11:30, and I will ask my questions, and Mr. Rush will ask his questions, and then any of the other members will ask their questions.

So I apologize to you all. You have already been very patient. But we will hopefully be back in about 15 minutes. So the hearing is recessed until 11:30.

[Recess.]

Mr. WHITFIELD. We will reconvene this hearing, and I, once again, apologize for the delay. Mr. Rush is on his way, and I know he has some questions, and I know Mr. Gardner has some questions, and there may be others that come in, but at this point, I will recognize myself for 5 minutes of questions and thank you again for your testimony.

Mr. Williams, I read everyone's testimony, and I am hoping I am getting some of this correct in my memory, but I believe your company in Colorado had invested somewhere in the neighborhood of maybe $10 million. Is that right?

Mr. WILLIAMS. That is correct.

Mr. WHITFIELD. OK. And I don't know the exact number of years, but I know that this is a process that has been going on for a number of years, and the regulations have been changed and demands have been changed. That generally is correct, right?

Mr. WILLIAMS. Correct.

Mr. WHITFIELD. Now, on this lease or leases that you have from the Federal Government, if you do not produce by a certain time, do you lose those leases?

Mr. WILLIAMS. Yes, you have certain performance criteria. Drilling is generally the word they use, that you need to have drilled within this amount of time or your leases will go away.

Mr. WHITFIELD. Does that mean drilling for production or drilling for exploration?

Mr. WILLIAMS. We are in an exploration phase, have been in an exploration phase for different horizons that have showed up in the last few years, particularly.

Mr. WHITFIELD. The reason I ask the question, we have had like 27 hearings on energy, and I hear the President talk about this a lot and others, and there is a comment, actually Ms. Goldfuss referenced it to a degree, and that is, that we have a lot of these companies out here that have a multitude of leases, and they are not doing anything on them, and when I hear the President talk about it, the impression that he leaves is we have these entities that have all these leases, and they are complaining they want more leases, and yet they are not even utilizing what they have, and maybe Mr. Helms and Mr. Sullivan can comment on this because you all are on the regulatory side as well, and Ms. Sgamma as well, but my impression is, and you all can correct me if I am wrong, that one of the primary reasons the drilling is not taking place is just the multitude of regulations and the obstacles that you have to go through in obtaining a permit.

Now, I referenced the Shell example off the coast of Alaska where they spent 5 or 6 billion dollars, and they still don't even have a permit for exploration, so am I correct in assuming that the reason a lot of these leases have not been utilized is the regulatory side of it? Would you agree with that, Mr. Helms?

Mr. HELMS. Chairman Whitfield, let me start by saying yes, I believe you are absolutely correct. Prior to 2008, we had this exact problem on the Fort Berthold reservation in North Dakota. We had a period of time there from 1986 through 2007 where only one well got drilled on the Fort Berthold reservation. We were drilling all around it, and the tribe there appealed to Congress and they also appealed to us to step in and straighten out the regulatory and tax situation so that they could develop their resources.

Two things happened. The State of North Dakota signed a regulatory and tax agreement with the tribe which stabilized taxation and put in place State regulations until the tribe could write its own regulations. The second thing——

Mr. WHITFIELD. OK. Forgive me, I have a minute and 20 seconds left.

Mr. HELMS. OK.

Mr. WHITFIELD. Do you agree theoretically with what I said, Mr. Sullivan, that a lot of this has to do with regulatory?

Mr. SULLIVAN. Mr. Chairman, I do, particularly as you mentioned before, the situation with Shell, which is an example of not only delays in permits, but then at one point the moratorium that was the Gulf moratorium was slapped on to Alaska as well.

Mr. WHITFIELD. Ms. Sgamma?

Ms. SGAMMA. The Department of Interior looks at it as if a switch is flipped, so they don't take into account any of the work, the environmental analysis, all of that is going on background.

Mr. WHITFIELD. Mr. Williams, I think you have already indicated that you agree generally with that?

Mr. WILLIAMS. Correct.

Mr. WHITFIELD. I have 36 seconds left now. Mr. Helms, the reason I was moving so quickly, I read this article in The Washington Post written by Steve Mufson, and it was entitled "In North Dakota, The Gritty Side of an Oil Boom." While most of the people I have talked to in North Dakota are quite excited about the economic boom and the unemployment rate being 3 percent, as I read this article, I noticed that in this article he talks about the problem of the oversize and overweight trucks, he talks about the need for additional schools because of all the children that are coming in, he talks about the increase in the felonies that are being committed in the State, he talks about the State's infrastructure needs has been quadrupled since this thing began, and he also talks about the pollution problems are totally out of control, and he also talks about—Mr. Schafer of the Sierra Club says that this thing is like a steamroller coming toward us, and we have got to change these regulations, we have got to make it more difficult to do business up here.

So here we have a State with an economic growth needed production of fuels, domestic fuels. Would you have any comment on this article? Have you read this article?

Mr. HELMS. Yes, Mr. Chairman, and thank you for asking about it. The article is filled with inaccuracies. For example, the statement that our regulations are not as strict as many States or that we don't have enough inspectors to keep up, we increased staff by 20 percent, and we are increasing by another 10 percent in the first half of this year. Our regulations, our waste regulations all comply with the EPA class II regulations, so they meet all standards and exceed all the standards, and in fact, when it comes to flaring, flaring is down, and natural gas infrastructure is being built. The quotes from the World Bank are inaccurate. If you use our actual measured numbers for flared gas, we wouldn't even make the list of 20 countries, and yet he puts us at fifth, and then he quotes such problems as no pool cues for the pool table and a broken—let's see, I think it is a broken treadmill, and the problem of some folks that own a restaurant, and they are making more money but working less hours.

Mr. WHITFIELD. That is horrible.

Mr. HELMS. It is riddled with inaccuracies and misstatements.

Mr. WHITFIELD. Thank you. I am not going to belabor the point. Mr. Rush, I know you have got another engagement, too, so you are recognized for 5 minutes.

Mr. RUSH. I want to thank you, Mr. Chairman, and Ms. Goldfuss, let me get right to it, in the interest of time. Can you tell us about opportunities for other resource development on Federal lands other than gas and oil development?

Ms. GOLDFUSS. Yes, definitely. When it comes to renewable development specifically, the Department of Interior has been trying different approaches, I think to address some of the concerns and some of the issues that have come up through oil and gas development to try and make it easier and faster for solar development. For example, just last week, they released a new process to speed up development in solar zones, and in the coming months, we expect they are going to reach the 10,000 target that was laid out for the agency in terms of numbers of permits released for renewables, and that is nonhydro, so we are talking about solar, wind, and geothermal projects that would be on public lands.

So it is a new approach. It is different, it is easier in some cases, because we know where the sun is, we know where the transmission is, versus oil which is underground, but it is a process and an approach that we hope will reduce litigation and get more solar online faster.

Mr. RUSH. Mr. Fisher, I was listening to a lot of interesting terms in your testimony, and you mentioned a number of benefits of balancing multiple uses on public lands, but you didn't put a lot of attention to significant economic benefits to outdoor recreational activities on Federal lands. Can you speak briefly to those benefits, those economic benefits?

Mr. FISHER. I can. You know, I mentioned in my testimony that, you know, Forest Service and BLM lands have an economic impact from visitors of $21.9 billion, and I know that in my home State of Montana, you know, during hunting season, it is hard not to see a blaze orange sign on restaurants, motels, all across the State, small businesses that says Welcome Hunters. It is certainly an extremely valuable economic impact for our rural communities in

places like Montana. As far as specific numbers, you know, I can certainly get back to you with figures from the U.S. Fish and Wildlife Service's survey.

Mr. RUSH. Would you say that recreational use on Federal lands, that would be a vibrant part of the economy that we should take into consideration as we consider how Federal lands are being utilized?

Mr. FISHER. Yes, I would agree with that statement.

Mr. RUSH. Ms. Goldfuss, do you have some specific numbers?

Ms. GOLDFUSS. I can expand a little bit on that. The Outdoor Industry Association released a report in conjunction with the Western Governors Association earlier in the summer, and it had brand new data looking at the outdoor industry as a whole, and their numbers show 6.1 million direct American jobs, $646 billion in outdoor recreation spending each year, $39.9 billion in Federal tax revenue, and $39.7 billion in State and local tax revenue, and frequently, we hear complaints that these jobs are just in hotels or chambermaids, but they released an actual breakdown of where these jobs are located, and 20 percent are in the manufacturing industries, and you have 12 percent in accommodation and food service, and then a mix between many other industries.

So it is a huge economic industry, and it is a big driver, and we are talking about all across many sectors. So the boom/bust concerns that you sometimes have with fossil fuels you certainly don't have with outdoor industry, and it has been growing even despite the great recession. It is one of the few industries that had growth throughout.

Mr. RUSH. Thank you. Thank you very much. I yield back, Mr. Chairman.

Mr. WHITFIELD. Thank you, Mr. Rush. At this time I recognize the gentleman from Colorado, Mr. Gardner, for 5 minutes.

Mr. GARDNER. Thank you, Mr. Chairman, and thank you to the witnesses for joining us today. I would like to, in particular, welcome Mr. Williams and Ms. Sgamma from Colorado for joining us today.

Just a couple of questions. Ms. Sgamma, I have seen statistics, I have seen other numbers out there that talk about the number of permits that have been denied, delayed over the past several years by this administration. Do you know how many jobs are currently being held up as a result of those permit delays?

Ms. SGAMMA. Well, it is a three-pronged approach on Federal lands. If you can get through the leasing phase and the environmental analysis phase, and then the permitting phase, then you can finally drill a well. So right now, we are seeing a huge backlog in the environmental analysis phase, and from just 20 projects that are proposed, we could create over 121,000 jobs. That is just from 3,100 wells drilled a year. If we look at those projects and see which ones have been delayed over 3 years, we find that the Federal Government is preventing about 65,000 jobs and $15 billion in economic activity every year.

So those are long-term jobs over the life of the project and those projects. So some of those projects are delayed even over 7 years. So that is a clear example where the Federal Government is pre-

venting companies from operating on those leases and creating jobs.

Mr. GARDNER. So 65,000 jobs that we could have hired that could be people back to work, good-paying jobs for their families, and yet we hear claims from this administration that it is doing everything, bending over backwards to make things easier, less red tape. Do you agree that this administration is making it easier for energy development?

Ms. SGAMMA. They have been making it easier for wind and solar, but certainly not for oil and gas. They have added new layers of analysis on top of existing layers of analysis on the leasing phase, they have let very few projects be approved, and they have—permitting times have increased to 298 days.

Mr. GARDNER. Do you believe the Department of Interior has taken into account your concerns when it comes to rules and regulations that they are currently issuing or considering?

Ms. SGAMMA. No, I don't think they have adequately taken into account industry information. For example, on the hydraulic fracturing rule, Mr. Nedd this morning couldn't answer how much that cost is. We have provided lots of information on the fact that that well and new wells will have an added cost of a quarter-million dollars. That is a quarter of a million dollars to Reed Williams and other small producers as well as other companies, and that just means that that is $250,000 less available per well, and in the aggregate about $1.6 billion annually just from these new BLM fracking rules, and that just means less money invested in the West in public land States.

Mr. GARDNER. And I hear a lot of concern from opponents of oil and gas that there are leases that aren't being utilized or are being underutilized, and Ms. Sgamma, I guess my question to you, isn't it a little bit like a business with their inventory where you actually need to have more inventory on hand than you are going to sell that day because you need to have the inventory to make your business work, and so if you could address that a little bit?

Ms. SGAMMA. Certainly, appreciate it. Well, right now we are operating on 49 percent of active leases. That is a huge number, that is a high utilization rate, and it is up from about 28 percent in the 1980s. So we were leasing less acreage and were utilizing more. But the fact of the matter is, the Federal Government doesn't give us any credit for all the background work. They don't give us credit for the fact that they are holding up over 7 years' projects. So those leases to them look like they are nonproducing, even though the Federal Government itself is the one holding that up. It is a total catch-22 situation.

And then there is always going to be a portion of the inventory that is not developed because an operator goes out, does some work, determines there is not enough oil and gas or, you know, it just isn't going to work out, so there is always going to be an inventory because it is a dynamic industry, we are going out, discovering, exploring, and sometimes it works out, sometimes it doesn't. So a lease is just a definite maybe.

Mr. GARDNER. And you mentioned 65,000 jobs that number, I think, about 20 projects. What revenue would that equate to the Federal Government if they were to go forward?

Ms. SGAMMA. You know, I don't remember off the top of my head. I think it was $139 million a year.

Mr. GARDNER. $139 million a year.

Mr. Williams, we have heard a lot of discussion about debate on whether or not operators are leaving Federal lands for non-Federal lands. I am wondering if you could talk about some of the challenges that you faced and heard of from your colleagues in the industry when it comes to that.

Mr. WILLIAMS. Certainly, thank you. Yes, the environment is tremendously important. Private dollars are supposed to come in to be an investment in my company's drilling wells, and all of the difficulties that in the regulatory environment starts being talked about out there in the world of dollar bills, they just stop being interested in investing on Federal lands, and they wait and say, well, go get some lands in east Texas where, you know, when you lease land there, the guy, the private owner that owns it will say, Mr. Williams, you want to come drill a well? You can drill it in my kitchen, you know.

So that whole environment changes everything of our ability to fund moving projects forward. So regulatory things then pile up on each other, and they cross each other. We had a situation where we had an EA done, an environmental assessment, and there was one well pad that the forest rangers came to us and said, we have decided we don't like the drainage pattern in that area, and we would like for you to move that well. So you say fine, let's go out there together and pick the replacement site, and we do it, and then we get a call that says, oh, you have got a new site, and it means you have got to do a new EA, and it can take 2 more years, another $100,000 of consulting fees.

Mr. GARDNER. The bottom line is people who would say that you are moving to non-Federal lands because it is just better there, the fact is that there is a bias, a prejudice when you do business with the Federal Government on Federal leases?

Mr. WILLIAMS. Correct.

Mr. GARDNER. Making it difficult, so difficult it is forcing people out.

Mr. WILLIAMS. Very difficult. And it is unnecessary. We are able to as an industry now drill horizontally and not do damage to the surface, all goals that were brought to us, and there is tremendous reserves owned by the Federal Government. You have got to remember that the whole Louisiana Purchase expands up right through the Rocky Mountains, and it happens to be where the Great Cretaceous Seaway was, and it is where all of our oil and gas reserves are, including off the coast of Texas in private lands, and we have a choice to drill on them or not. Thank you for the question.

Mr. WHITFIELD. The time has expired. I just have one other question, Mr. Clements, I would like to ask you. You made reference in your testimony that the President's 2012–2017 energy plan really didn't do anything for the country from your personal experience and from your company's perspective. Could you just summarize why you think that is the case?

Mr. CLEMENTS. Basically I didn't see any kind of economic data to where, you know, it didn't seem like it was a great big an-

nouncement. They come out and say we are going to do a thousand leases and create a million jobs. I didn't see any of that information in the leasing plan, and then when you look at it, we are still drilling in the same area for the last decade, and how can you——

Mr. WHITFIELD. So no new areas?

Mr. CLEMENTS. Yes, there is no new areas.

Mr. WHITFIELD. OK, thank you.

Did you have anything else, Mr. Rush?

Mr. RUSH. No, no thank you.

Mr. WHITFIELD. OK. Well, first of all, I want you to know it is kind of rushed this afternoon, but we do have all of your testimony, and we have read all of the testimony, and it is part of the record, and I genuinely appreciate all of you taking time to come and express your views on these important issues, and those of us in the committee look forward to working with all of you as we move forward to try to become more energy independent and stimulate our economy. So thank you very much.

Mr. RUSH. Mr. Chairman, before we conclude this hearing of the committee, I ask unanimous consent to enter into the record an article that I mentioned in my opening statement, an article by Mr. Richard A. Muller, written by Mr. Richard A. Muller that appeared in The New York Times on July 28, 2012.

Mr. WHITFIELD. Without objection, we will enter it into the record.

[The information follows:]

The New York Times

July 28, 2012

The Conversion of a Climate-Change Skeptic

By RICHARD A. MULLER

Berkeley, Calif.

CALL me a converted skeptic. Three years ago I identified problems in previous climate studies that, in my mind, threw doubt on the very existence of global warming. Last year, following an intensive research effort involving a dozen scientists, I concluded that global warming was real and that the prior estimates of the rate of warming were correct. I'm now going a step further: Humans are almost entirely the cause.

My total turnaround, in such a short time, is the result of careful and objective analysis by the Berkeley Earth Surface Temperature project, which I founded with my daughter Elizabeth. Our results show that the average temperature of the earth's land has risen by two and a half degrees Fahrenheit over the past 250 years, including an increase of one and a half degrees over the most recent 50 years. Moreover, it appears likely that essentially all of this increase results from the human emission of greenhouse gases.

These findings are stronger than those of the Intergovernmental Panel on Climate Change, the United Nations group that defines the scientific and diplomatic consensus on global warming. In its 2007 report, the I.P.C.C. concluded only that most of the warming of the prior 50 years could be attributed to humans. It was possible, according to the I.P.C.C. consensus statement, that the warming before 1956 could be because of changes in solar activity, and that even a substantial part of the more recent warming could be natural.

Our Berkeley Earth approach used sophisticated statistical methods developed largely by our lead scientist, Robert Rohde, which allowed us to determine earth land temperature much further back in time. We carefully studied issues raised by skeptics: biases from urban heating (we duplicated our results using rural data alone), from data selection (prior groups selected fewer than 20 percent of the available temperature stations; we used virtually 100 percent), from poor station quality (we separately analyzed good stations and poor ones) and from human intervention and data adjustment (our work is completely automated and hands-off). In our papers we demonstrate that none of these potentially troublesome effects unduly biased our conclusions.

The historic temperature pattern we observed has abrupt dips that match the emissions of known explosive volcanic eruptions; the particulates from such events reflect sunlight, make for beautiful sunsets and cool the earth's surface for a few years. There are small, rapid variations attributable to El Niño and other ocean currents such as the Gulf Stream; because of such oscillations, the "flattening" of the recent temperature rise that some people claim is not, in our view, statistically significant. What has caused the gradual but systematic rise of two and a half degrees? We tried fitting the shape to simple math functions (exponentials, polynomials), to solar activity and even to rising functions

like world population. By far the best match was to the record of atmospheric carbon dioxide, measured from atmospheric samples and air trapped in polar ice.

Just as important, our record is long enough that we could search for the fingerprint of solar variability, based on the historical record of sunspots. That fingerprint is absent. Although the I.P.C.C. allowed for the possibility that variations in sunlight could have ended the "Little Ice Age," a period of cooling from the 14th century to about 1850, our data argues strongly that the temperature rise of the past 250 years cannot be attributed to solar changes. This conclusion is, in retrospect, not too surprising; we've learned from satellite measurements that solar activity changes the brightness of the sun very little.

How definite is the attribution to humans? The carbon dioxide curve gives a better match than anything else we've tried. Its magnitude is consistent with the calculated greenhouse effect — extra warming from trapped heat radiation. These facts don't prove causality and they shouldn't end skepticism, but they raise the bar: to be considered seriously, an alternative explanation must match the data at least as well as carbon dioxide does. Adding methane, a second greenhouse gas, to our analysis doesn't change the results. Moreover, our analysis does not depend on large, complex global climate models, the huge computer programs that are notorious for their hidden assumptions and adjustable parameters. Our result is based simply on the close agreement between the shape of the observed temperature rise and the known greenhouse gas increase.

It's a scientist's duty to be properly skeptical. I still find that much, if not most, of what is attributed to climate change is speculative, exaggerated or just plain wrong. I've analyzed some of the most alarmist claims, and my skepticism about them hasn't changed.

Hurricane Katrina cannot be attributed to global warming. The number of hurricanes hitting the United States has been going down, not up; likewise for intense tornadoes. Polar bears aren't dying from receding ice, and the Himalayan glaciers aren't going to melt by 2035. And it's possible that we are currently no warmer than we were a thousand years ago, during the "Medieval Warm Period" or "Medieval Optimum," an interval of warm conditions known from historical records and indirect evidence like tree rings. And the recent warm spell in the United States happens to be more than offset by cooling elsewhere in the world, so its link to "global" warming is weaker than tenuous.

The careful analysis by our team is laid out in five scientific papers now online at BerkeleyEarth.org. That site also shows our chart of temperature from 1753 to the present, with its clear fingerprint of volcanoes and carbon dioxide, but containing no component that matches solar activity. Four of our papers have undergone extensive scrutiny by the scientific community, and the newest, a paper with the analysis of the human component, is now posted, along with the data and computer programs used. Such transparency is the heart of the scientific method; if you find our conclusions implausible, tell us of any errors of data or analysis.

What about the future? As carbon dioxide emissions increase, the temperature should continue to rise. I expect the rate of warming to proceed at a steady pace, about one and a half degrees over land in the next 50 years, less if the oceans are included. But if China continues its rapid economic growth (it has averaged 10 percent per year over the last 20 years) and its vast use of coal (it typically adds one new gigawatt per month), then that same warming could take place in less than 20 years.

Science is that narrow realm of knowledge that, in principle, is universally accepted. I embarked on this analysis to answer questions that, to my mind, had not been answered. I hope that the Berkeley Earth analysis will help settle the scientific debate regarding global warming and its human causes. Then comes the difficult part: agreeing across the political and diplomatic spectrum about what can and should be done.

Richard A. Muller, a professor of physics at the University of California, Berkeley, and a former MacArthur Foundation fellow, is the author, most recently, of "Energy for Future Presidents: The Science Behind the Headlines."

Mr. WHITFIELD. Thank you very much. So that concludes today's hearing and thank you all once again. We will leave the record open for 10 days.

[Whereupon, at 12:04 p.m. the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

Questions for the Record
Michael D. Nedd, BLM Assistant Director
House Energy and Commerce Subcommittee on Energy and Power
"The American Energy Initiative – The Growing Differences for Energy Development on Federal vs. non-Federal Land"
August 2, 2012

The Honorable Ed Whitfield

1. **In May the Department of the Interior issued a report to the President titled "Oil and Gas Lease Utilization, Onshore and Offshore" with the intended purpose to show energy companies are sitting on idle leases. What was missing was any discussion about the role Interior is playing in holding up energy projects.**

   a. **A company cannot drill on federal land without an approved application for permit to drill. How many applications for permit to drill (APD) nationwide are currently pending with Interior?**

      Answer: As of September 1, 2012, the Bureau of Land Management (BLM) has 3, 908 pending APDs. Because the BLM has been reducing a backlog of APDs, this is the lowest number of pending APDs since 2005.

      As of September 7, 2012, the Bureau of Safety and Environmental Enforcement (BSEE) has 57 APDs pending review and approval for oil and gas activities on the Outer Continental Shelf. Eleven of these APDs are for new deepwater wells in the Gulf of Mexico, which were submitted during the week of September 3.

   b. **How long is it currently taking for Interior to process an APD? Has this time increased since 2008?**

      Answer: The table below provides an overview of key timeframes associated with the processing of a BLM-approved APD after the applicant has submitted a complete application. Per statute (Section 366 of the Energy Policy Act of 2005), the BLM may not make a decision on an APD until the application is complete. Section 366 was reflected in the regulations in 2007 through the BLM's revision of Onshore Oil and Gas Order Number 1, Approval of Operations, which, among other things, outlines components of a complete APD.

BLM APD Processing Times by Fiscal Year							
	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Average Days After Application is Complete	39	127	74	134	84	72	71

The graph and the two tables below provide an overview of key timeframes associated with the processing of a BSEE approved APD. Figure 1 below illustrates the approval times for Deepwater (> 500 feet) New Well APDs submitted post-

Deepwater Horizon and approved before the end of May 2012. The time to review permits initially increased relative to pre-*Deepwater Horizon* review times due to new safety requirements, but those times shortened significantly as operators and BSEE staff became more familiar with those new requirements such that the average review time for the ten deepwater New Well permits issued immediately prior to May 31, 2012, was 34 days.

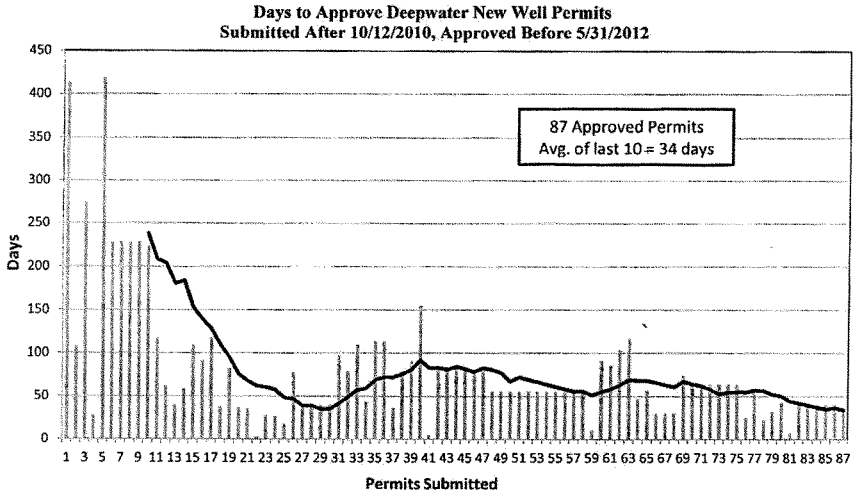


Figure 1. Graph of permit approval times for deepwater New Well permits submitted after October 12, 2010, and approved before May 31, 2012. The earliest submitted permits are on the left; more recently submitted permits are on the right. The trend line in this chart is a moving average of the 10 previous permit approval times, designed to highlight the longer-term trends. The total number of permits = 87; the average approval time for the 10 most recently approved permits prior to 5/31/2012 is 34 days.

The tables below were included in the Department's response to GAO's recent Plans and Permits Report (GAO-12-423), and provide additional detailed information on the permitting time frame pre and post *Deepwater Horizon*.

Table 1: Review Time Frames and Average Number of Returns Per Submission for All Types of Approved Deepwater Drilling Permits

	New well			Revised new well		
	January 1, 2005, through April 19, 2010	October 12, 2010, through May 31, 2011	June 1, 2011, through May 31, 2012	January 1, 2005, through April 19, 2010	October 12, 2010, through May 31, 2011	June 1, 2011, through May 31, 2012
Number of submittals	414	17	70	687	35	192
Median days from initial submittal until final approval	20	119	56	1	3.8	2.1
Average number of returned drilling permits per approved submittal	1.57	3.5	2.04	0.54	1.69	0.44

	Sidetrack			Revised sidetrack		
	January 1, 2005, through April 19, 2010	October 12, 2010, through May 31, 2011	June 1, 2011, through May 31, 2012	January 1, 2005, through April 19, 2010	October 12, 2010, through May 31, 2011	June 1, 2011, through May 31, 2012
Number of submittals	259	7	21	177	15	45
Median days from initial submittal until final approval	4	34	10.6	1	1.7	1.3
Average number of returned drilling permits per approved submittal	0.85	3.88	1.81	0.32	1.00	0.48

	Bypass			Revised bypass		
	January 1, 2005, through April 19, 2010	October 12, 2010, through May 31, 2011	June 1, 2011, through May 31, 2012	January 1, 2005, through April 19, 2010	October 12, 2010, through May 31, 2011	June 1, 2011, through May 31, 2012
Number of submittals	149	7	28	124	10	40
Median days from initial submittal until final approval	1	0.7	1.8	1	2.9	2
Average number of returned drilling permits per approved submittal	0.55	2.29	0.79	0.39	1.00	0.73

Table 2: Review Time Frames and Average Number of Returns per Submission for all Types of Approved Shallow Water Drilling Permits

	New well			Revised new well		
	January 1, 2005, through April 19, 2010	June 8, 2010, through May 31, 2011	June 1, 2011, through May 31, 2012	January 1, 2005, through April 19, 2010	June 8, 2010, through May 31, 2011	June 1, 2011, through May 31, 2012
Number of submittals	1,105	51	67	1,246	93	96
Median days from initial submittal until final approval	11	38	29	1	1.7	1.2
Average number of returned drilling permits per approved submittal	1.25	2.72	1.97	0.31	0.85	0.72

	Sidetrack			Revised sidetrack		
	January 1, 2005, through April 19, 2010	June 8, 2010, through May 31, 2011	June 1, 2011, through May 31, 2012	January 1, 2005, through April 19, 2010	June 8, 2010, through May 31, 2011	June 1, 2011, through May 31, 2012
Number of submittals	648	81	79	492	94	83
Median days from initial submittal until final approval	4	23	18.6	1	1	1.6
Average number of returned drilling permits per approved submittal	0.72	2.20	1.64	0.34	0.75	0.63

	Bypass			Revised bypass		
	January 1, 2005, through April 19, 2010	June 8, 2010, through May 31, 2011	June 1, 2011, through May 31, 2012	January 1, 2005, through April 19, 2010	June 8, 2010, through May 31, 2011	June 1, 2011, through May 31, 2012
Number of submittals	377	20	45	233	14	41
Median days from initial submittal until final approval	1	1	1	1	0.9	1
Average number of returned drilling permits per approved submittal	0.38	1.14	0.87	0.26	0.38	0.60

c. How many lawsuits and appeals from environmental groups does Interior face each year in regards to oil and gas projects? How does this affect the cost and time it takes to approve projects?

Answer: Since 2008, environmental organizations have filed a total of 26 lawsuits against the BLM challenging various aspects of the agency's administration of oil and gas resources. Annual totals have ranged from a high of nine lawsuits in 2008 to two lawsuits thus far in 2012. During the same timeframe, industry and other parties have filed 12 lawsuits against the BLM on various matters pertaining to oil and gas administration. The BLM does not maintain statistics on administrative appeals.

The BLM faces continual oil–and-gas-related litigation, protests, and appeals from environmental groups as well as industry groups and oil and gas companies. The ongoing burden of preparing for, reviewing, and defending or changing agency actions results in additional delay in the permitting process. Key personnel involved in processing permits are also those involved in responding to litigation, protests, and appeals, leaving less time for processing permits. In addition, the BLM becomes more cautious, taking more time in order to conduct a more thorough review of permits. This may also result in applying additional constraints to future permits due to findings from lost litigation, protests, and appeals.

2. **Secretary Salazar recently stated that Interior needs to heavily regulate hydraulic fracturing because some states have no laws regarding hydraulic fracturing. What states, where hydraulic fracturing is currently taking place on federal lands, have no laws regulating hydraulic fracturing?**

   Answer: According to a recent Government Accountability Office report (GAO-12-874), hydraulic fracturing is occurring in a number of states, with disparate laws covering hydraulic fracturing. In some cases, states have no regulations covering certain aspects of well stimulation addressed by the BLM's Proposed Rule. For example, North Dakota and Texas do not have regulations or statutes requiring authorization or notice, prior to hydraulic fracturing. The Proposed Rule issued by the BLM provides for prior authorization and notice requirements. Further, Pennsylvania and Texas do not have any regulations or statutes covering pressure monitoring, testing, limitations or other mechanical integrity requirements during well treatment or stimulation. Requiring mechanical integrity tests to ensure wellbore integrity and verifying zonal isolation of useable water-bearing formations are focal points of the BLM's Proposed Rule.

3. **On the second panel we heard testimony from a representative from the group Trout Unlimited, a group that has consistently opposed oil and gas development on Federal lands. Approximately how many times has the group Trout Unlimited filed lawsuits and appeals against Interior over oil and gas projects in the past 10 years?**

   Answer: According to a Public Access to Court Electronic Records (PACER) search of Federal court cases from January 1, 2003, to the present, Trout Unlimited has not been involved in any litigation involving the Department of the Interior's onshore oil and gas projects. The BLM does not maintain statistics on administrative appeals. (*Note:* Colorado Trout Unlimited is listed as a plaintiff in *Colorado Environmental Coalition v. Kempthorne*, 08-1460 (D. Colo.), which challenged the BLM's adoption of the Roan Plateau RMP on NEPA and FLPMA grounds. However, Colorado Trout Unlimited is a Colorado nonprofit corporation with 10,000 members that is separate from, but affiliated with, Trout Unlimited.)

The Honorable Cory Gardner

1. **Is it true that unitization of leases is a routine process for BLM? How long does the process take on average? In the case of the Thompson Divide Project in Colorado, it**

has taken over 18 months. Can you explain to me why this is the case, and what you see changing in the months to come?

Answer: The unitization of leases is usually a routine process for the BLM. The amount of time required for the BLM to approve a Unit Agreement varies depending on the number of parties participating in agreement, the size of the unit area, the geology, the nature of the oil and gas reservoir, and the proposed well or wells. To be approved, a unit operator must submit a complete application to be evaluated by the BLM. As part of the agency's review, the BLM will designate the unit area upon which the unit operator must then get at least 85% of the mineral owners within the boundary to join the unit and sign the unit agreement. If the proposal is found to be in the public interest and once proof of participation is submitted, the unit can be approved by the BLM. These steps can take anywhere from three months to several years.

Regarding the request for unit approval in the Thompson Divide Area, the BLM issued 18 Federal oil and gas leases consisting of about 32,000 acres of U.S. Forest Service lands to SG Energy to develop oil and gas resources. The leases will expire in 2013. To minimize the impact that drilling and development will have on the area, SG Energy requested that the leases be designated as the Lake Ridge Unit. As part of the review process with the BLM, the proposed unit has been reduced to about 29,000 acres. This acreage consists mostly of Federal minerals leased to SG Energy, but also consists of acreage not owned by the Federal government or leased to SG energy.

Unitization is a routinely used agreement that identifies how an oil and gas reservoir consisting of Federal and non-Federal property will be developed in a manner that can reduce costs, maximize recovery, and help operators minimize the need for infrastructure, disturbance, and other impacts by managing the unit as a single entity rather than individual leases, each requiring development. The BLM has not designated the Unit because of unresolved concerns by the local government, the surrounding community, the Thompson Divide Coalition, Wilderness Workshop, and other environmental protection groups opposed to oil and gas development.

2. **U.S. District Court Judge Marcia Krieger recently affirmed that federal law requires BLM to lease the Roan Plateau in western Colorado. What is BLM's plan for finalizing the environmental review now that litigation is over? When do you expect to issue the first APDs after more than ten years of public process that produced the most restrictive BLM drilling plan in the nation?**

Answer: On June 22, the United States District Court for the District of Colorado remanded the RMP to the agency for further consideration. The BLM in Colorado is currently engaged in discussions with the lease holders and the litigants to find an appropriate path forward that will take the recent court ruling into consideration.

3. **When will the BLM release a final plan with regard to the oil shale Programmatic Environmental Impact Statement in Colorado? Will it deny any real possibility of commercial development, and when will the BLM release the commercial leasing**

regulations so that interested operators can begin to make investment decisions and create jobs?

Answer: In 2009, a consortium of plaintiffs filed two lawsuits in the Federal District of Colorado, each now captioned *CEC v. Salazar*, against the BLM and the Department of Interior. The first suit challenged the BLM's 2008 oil shale rule and the second suit challenged the BLM's 2008 resource management plan amendments and record of decision for Oil Shale and Tar Sands Resources. Both suits were settled. The BLM agreed in settlement to propose certain amendments to the oil shale rule, and thereafter to publish a final rule. The BLM also agreed to initiate a new planning process for oil shale and tar sands resources on the public lands in Colorado, Utah, and Wyoming, and to use best efforts to complete this process by December 31, 2012.

A draft of the proposed amendments to the rule is under interagency review pursuant to Executive Order 12866.

The Final PEIS/Proposed Plan Amendment is still under preparation. The Draft PEIS/Plan Amendment was published in February, 2012, beginning a 90-day public review period that ended on May 4, 2012. Under the Preferred Alternative presented in the Draft, approximately 462,000 acres would remain open for application for future oil shale and tar sands leasing and development in Colorado, Utah, and Wyoming. The Draft's Preferred Alternative would maintain a focus on research and development prior to commercial development of oil shale and would allow the BLM to obtain more information about the associated technology and environmental consequences before committing lands to broad scale development.

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